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Railway Age

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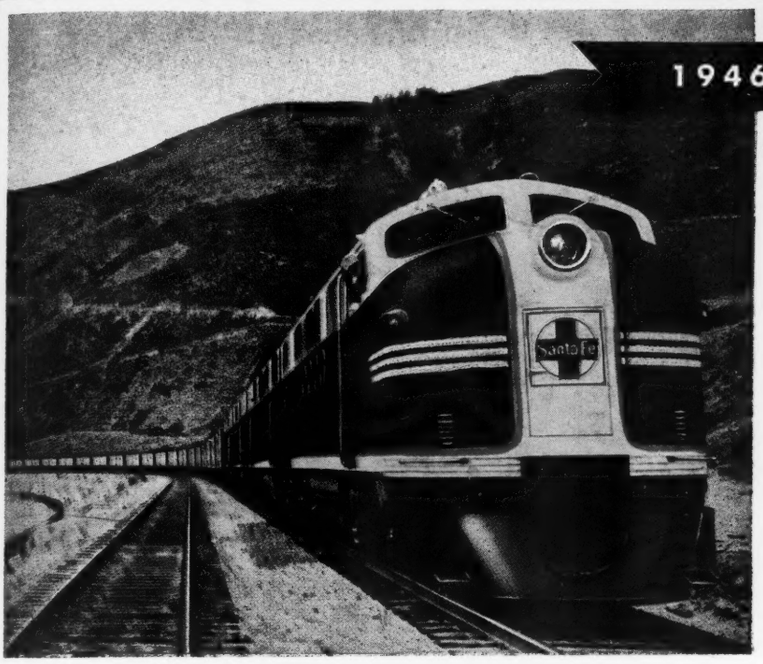
1946 PARADE OF THE VETERANS



A Veteran carries the freight

over 607,907 miles

ON the Santa Fe this General Motors Diesel freight locomotive — 5400 H. P. — went into regular service in February 1941 and up to Dec. 31, 1945, operated 607,907 miles most of which was between Winslow, Ariz. and Barstow, Cal.

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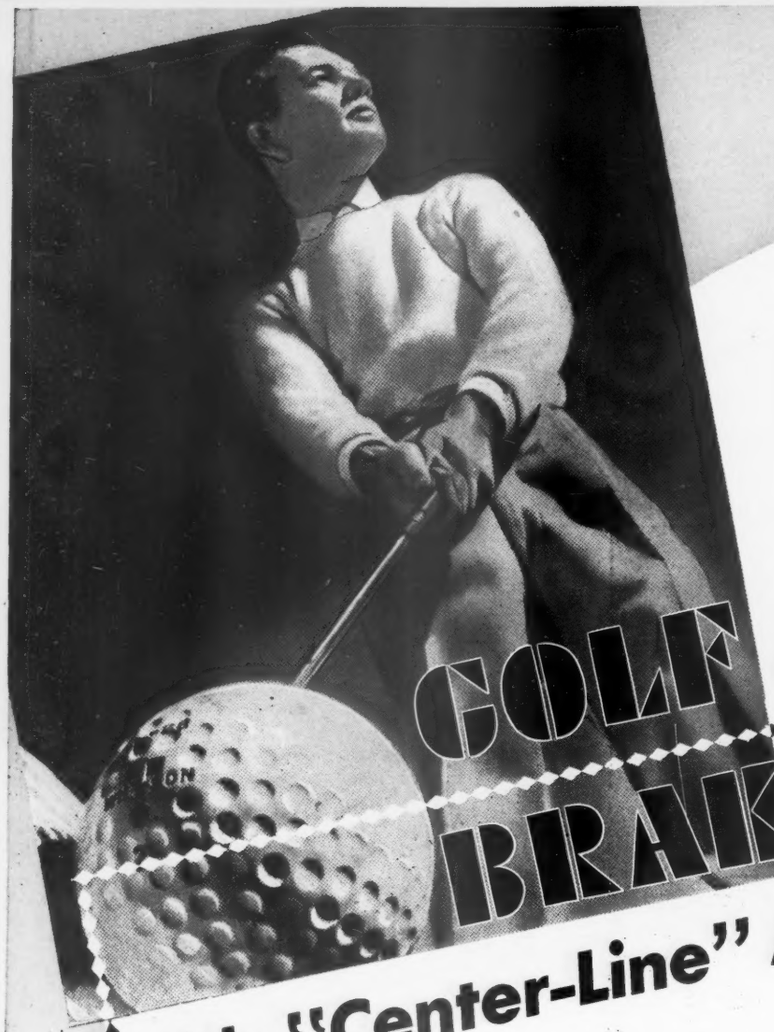

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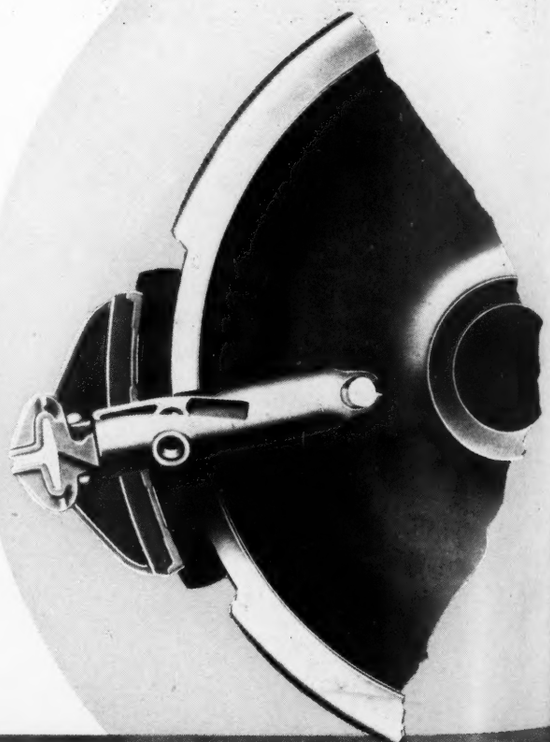

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Railway Age

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In This Issue

Page

Steam, Diesel and Electric Power Combine to Handle Increased Traffic ***1174***

The third in a series of articles reporting how lines to the Pacific Northwest met the challenge of vastly increased traffic, describes the part played by the Milwaukee through careful distribution and utilization of power.

Tests of L.M.S. Turbine Locomotive ***1178***

Rather similar to a four-cylinder, "Pacific" type express locomotive is an experimental model, with multi-stage non-condensing turbine, built at the Crewe Works.

Selecting Solicitors Scientifically ***1181***

Henry Dawes weighs the characteristics and attributes which make up a successful solicitor as based on studies made by the Kansas City Southern.

EDITORIALS

Labor Relations Headed Downhill 1171
Turbine Experience 1172
Congress Needs Renovating 1172
Money Down the Sewer 1173

GENERAL ARTICLES

Steam, Diesel and Electric Power Combine to Handle Increased Traffic 1174
Five Interlockings at Norfolk 1176
Tests of L.M.S. Turbine Locomotive, by E. C. Poultney 1178
Selecting Solicitors Scientifically, by Henry Dawes 1181
Britain Tries New Type Railway Station, by William H. Hamlin 1183

NEW DEVICES **1186**

GENERAL NEWS **1188**

WITH THE GOVERNMENT AGENCIES **1193**

The Railway Age is indexed by the Industrial Arts Index and also by the Engineering Index Service.

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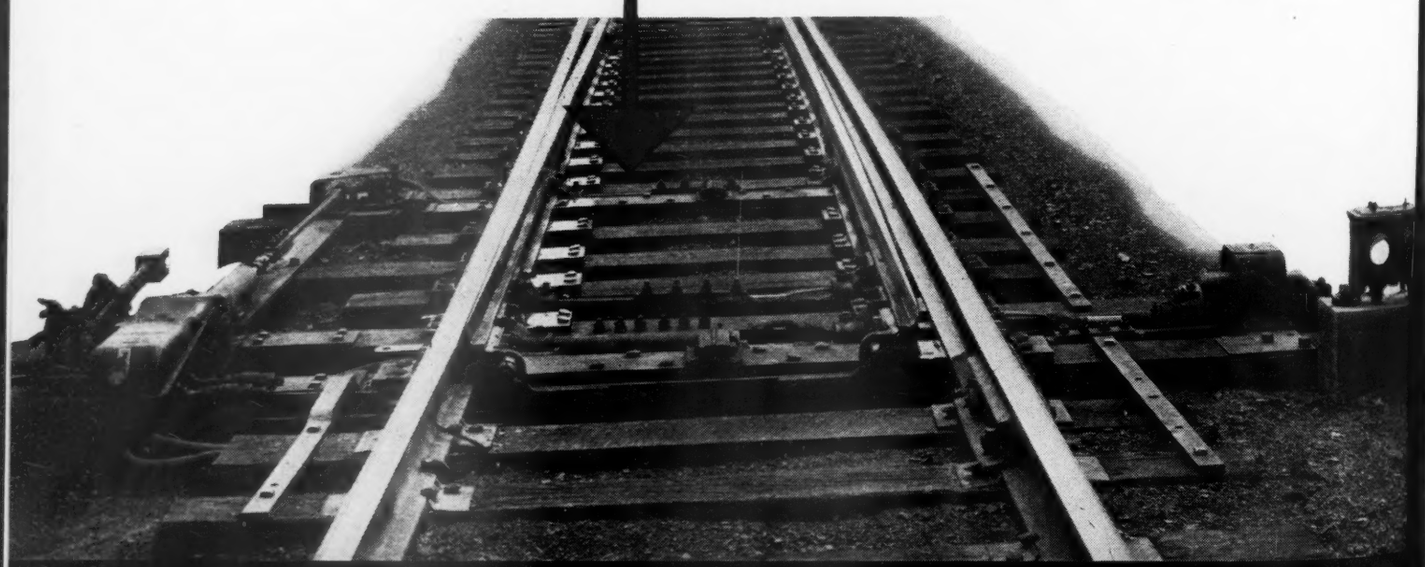

PROTECTION EQUIVALENT TO THAT PROVIDED BY INTERLOCK

The Week at a Glance

STATUS QUO: By refusing to dissolve the injunction which prevents carriers from putting new tariffs into effect to comply with the Interstate Commerce Commission's order in No. 28300, the Supreme Court has left class rate relationships undisturbed pending an appeal from the lower court decision that the interim rate changes (higher in the East, lower in the South and West) were legally prescribed. Thus the court has dismissed the commission's contention that it should not have to authorize a general freight rate increase until a greater "uniformity" in class rates is realized.

●

POWER PROBLEM: The Milwaukee shared with other roads serving the Puget Sound country a vastly increased volume of business while the war in the Pacific was going on. Its situation was a little different from that of the neighboring lines, however, in that it has two electrified sections in the more mountainous districts, separated by a steam-operated segment. Only 84 electric locomotive units were available on the 656 electrified miles, all of which were bought in 1912 when that type of power was put in service. As explained in an article on page 1174, even the most efficient utilization of this power was insufficient to meet the peak demand, so oil-burning steam engines were brought in where water facilities were available, and Diesel-electric road freight locomotives, regularly assigned to the non-electrified inter-mountain portion of the line, were frequently run through one or the other of the electrified sections.

●

RIGHT DIRECTION: A reform—long overdue—of the committee machinery of Congress has been undertaken by a group of members of its two houses, and a bill to carry out many of their recommendations has been passed by the Senate. As pointed out editorially in this issue, the proposal is far from adequate in its provisions for transportation, leaving undisturbed the existing illogical separation of legislative consideration between tax-supported activities in this field and those maintained by private capital. But it is, nevertheless, a move toward wiping out many of the political handicaps which have made serious consideration of, and timely action on, desirable legislation discouraging and difficult. Because it promises to make the procedures of Congress more business-like, more independent of the influence of zealots and special pleaders, and more responsive to the arguments of efficiency and fairness, the proposal deserves examination and support.

●

STEAM TURBINE: A British steam-turbine locomotive, built in 1935 and subjected since then to a variety of tests, is described (in an illustrated article in this issue) in comparison with a generally similar four-cylinder Pacific type design built about the same time. The main (that is, forward) turbine has 16 stages and a speed of 13,500 r.p.m. at 90 m.p.h. Its nominal rating is 2,600 hp. Gearing, lubrication, superheaters and exhaust nozzle arrangement are discussed, and the characteristics of the London-to-Glasgow line on which the engine was tried out are given in detail. Small differences were exhibited in fuel and steam economy, leading to the suggestion that, if the theoretical thermal advantages of the turbine are to be realized, higher steam pressure and temperature must be employed than are customary with conventional designs.

●

TIGHTENING THE LEASH: The Civil Aeronautics Board has served notice that it is about to catch up with the non-scheduled air lines business which has mushroomed since the war ended. Among proposed regulations is one requiring all except the smallest operators to file tariffs, and no exceptions would be made in the application of requirements with respect to filing reports, complying with labor legislation, and following Civil Aeronautics Act provisions dealing with "unfair practices." Moreover, as reported in the news pages, the board has tightened up its definition of non-scheduled operations, pointing out it has a far more restricted meaning than mere absence of a published timetable.

●

MEASURING MEN: What one road has done to develop dependable bases for appraising the aptitudes and qualifications of men holding, or under consideration for, freight solicitors' jobs is told this week in an article by Henry Dawes, assistant to vice-president of the Kansas City Southern. To the extent that such methods have survived the test of actual practice, they are shown to be of substantial value in reducing reliance on hunches, hazy judgments and personal prejudices in determining which men do or do not have the proper personal traits to succeed in solicitation work. To make them more useful and more exact, the collaboration of other railroads in establishing proved standards is invited.

●

NORFOLK INTERLOCKINGS: In 14 miles between its South Branch yard and the Sewalls Point terminal in the Norfolk, Va., area, the Virginian crosses two navigable rivers and five railroads at grade. Aside from interchange movements, the Virginian normally operates 25 to 30 trains daily in this territory, so congestion could develop very quickly if they were delayed at any or all of these crossings. To ameliorate this condition to the greatest possible degree, five new all-relay control electric interlockings have been installed, each fitted with panel control machines and illuminated track diagrams. An illustrated description of these improvements appears this week on page 1176.

●

CAR EXPORT GROUP: Announcement has been made of the formation of an export corporation representing the principal American freight car builders, its purpose being to promote the sale of freight cars abroad under the provisions of the statutes permitting joint action for such purposes without risk of prosecution therefor by the vigilant and omnivorous lawyers on the payroll of the Department of Justice.

HOURLY PAY $1.10: The statistics bureau of the Interstate Commerce Commission has come up with a calculation, reported this week in the news pages, that the average straight-time hourly pay of railroad employees will be $1.10 as a result of the recent wage increases, and that the wage bill of Class I roads this year will be around $725 million more than it would have been with the 1945 wage scales. This estimate is based on the assumption that the total "hours paid for" in 1946 will be 95 per cent of the 1945 total. The average hourly rate in effect as a result of the wage adjustments is 52.7 per cent higher than that prevailing in 1939.

●

ACTIONS SPEAK LOUDER: By his veto of the Case bill President Truman very effectively poured cold water on the nascent blaze of public enthusiasm that followed the bold words with which he assailed the leaders of the two-day railroad strike. By that veto, the leading editorial this week points out, he practically guaranteed labor leaders freedom to exercise any taste for violence or extortion or reneging contracts that they may happen to want to indulge, and in so doing made the success of the most selfish and anti-social bosses all the more certain, and the tenure and authority of the more statesmanlike and peaceable union heads all the less secure. Unless there is a sufficient change in the composition of the new Congress, to be elected this fall, to effectuate a government policy toward big-union ruthlessness much more courageous than that of the present Administration, the prospects for industrial peace or for the profitable functioning of private business enterprise at its best are far from cheerful.

●

STANDARDIZED STATIONS: One of this issue's feature articles explains and illustrates the experimental assembled station building worked out by the architect of the London, Midland & Scottish system. Using concrete slabs, standard metal and plywood panels, interchangeable doors and windows, and uniformly-spaced steel columns and roof beams, a building of practically any desired dimensions or arrangement can be set up quickly and cheaply from stock materials. Among the advantages of such factory-built structures, according to the architect, are flexibility of construction, low maintenance cost, high salvage value, and pleasing appearance.

●

I. C. C. PLANS STAND: The Supreme Court, in its last session before adjourning for the summer, disposed of a number of cases in which railroad reorganization plans approved by the Interstate Commerce Commission had been challenged, in each instance upholding the commission. Phenomenal earnings during the war are not a proper basis for upsetting commission plans, the court said, if it is clear that the commission took those earnings, or their likelihood, into consideration. At the same time, as noted in the news columns, the court refused to go into the current B. & O. debt adjustment plan, apparently leaving the way clean for it to be consummated.

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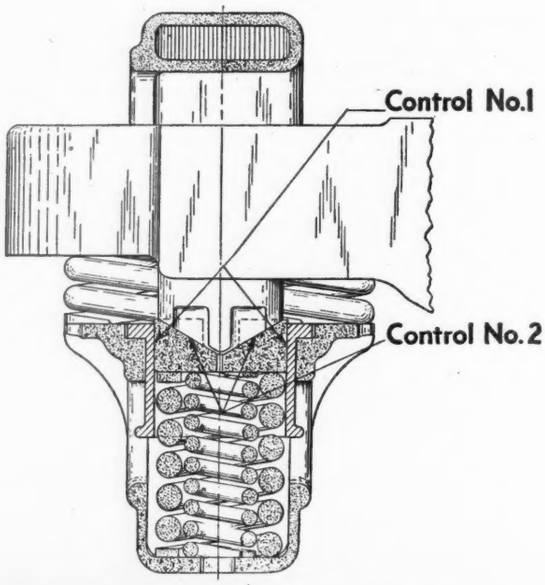

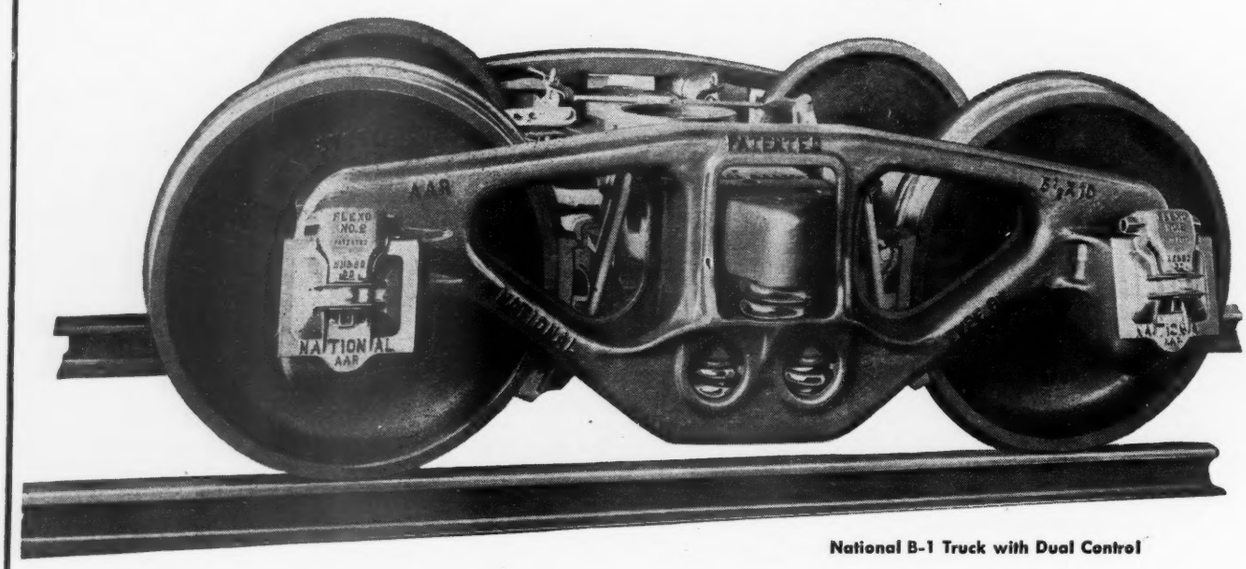

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RAILWAY AGE

Labor Relations Headed Downhill

This paper did not go overboard for President Truman's oratory at the time of the railroad strike, in which he held forth about the supremacy of the whole people over the selfish designs of a recalcitrant minority. The high-handed measures which he then recommended to Congress—especially the drafting of strikers into the Army—showed plainly that he was not disposed to deal with the *causes* of the intransigeance of organized labor, but only with the *symptoms*. As a matter of fact, Messrs. Whitney and Johnston were made scapegoats. While Mr. Truman denounced these railway union leaders for their "strike against the government," of a couple of days' duration, his subordinates were carrying on active negotiations with John L. Lewis, whose union conducted a much longer "strike against the government" than the trainmen and engineers did. And the Administration wound up by conceding to Lewis his demands over and above the usual 18½-cents-per-hour increase—exactions which were parallel in substance and expense to the "featherbed" rules vainly sought by Messrs. Whitney and Johnston.

It is no condonement of the behavior of the leaders of the striking railway unions to point out that their action, so bitterly excoriated by the President, was not any more unreasonable than that of other labor leaders who were not castigated at all, but were, on the contrary, richly rewarded for their recalcitrance. The treatment accorded by the Administration to John L. Lewis and other "hard-boiled" labor leaders suggests that Mr. Whitney and Mr. Johnston were singled out for punishment, not because their conduct was intolerable *per se*, but because it was objectionable to a greater degree than that to which they were entitled by the extent of their political power. The Administration's boiling point, that is, is considerably higher in dealing with a labor leader with 400,000 or more loyal followers, than with those who command only 250,000 or less.

Condoned Practices Belie Stated Principles

A man records his true measure, not by his words—which may be written for him by "ghosts"—but by his actions. Mr. Truman used brave words in talking about the railroad strike and the principles of good government which it violated. He afforded a dependable gage of his character and understanding by his veto of the Case bill. By his disapproval of this measure, he has given his active support to the following practices which the bill sought to restrain:

1. Resort by unions to robbery and extortion, by violence or threats of violence.
2. Insistence by unions that an employer's output be taxed for the benefit of union treasuries (allegedly for "health and welfare" purposes, but with no guarantee to that effect).
3. Retention by unions of the privilege to violate their contracts whenever they feel so inclined, and with no penalty for such violation.
4. Retention of the privilege of strikers to have back the jobs they leave, even though they are guilty of violence during the conduct of a strike.
5. Retention of the privilege of a union to engage in "secondary boycotts," i. e., refusal to work for an employer against whom the union has no grievance except that he uses, perhaps for lack of any other source of supply, the products of a concern against which a strike is being conducted.
6. Insistence by unions that foremen join the ranks of organized labor.
7. Opposition of unions to any "cooling-off" periods or governmental "fact-finding."

Playing the Totalitarians' Game

With a President in office who can see his way clear to support such behavior by organized minorities, it would be foolish to be optimistic regarding the prospects for industrial peace or economic progress in this country during the next two years, unless a Congress can be elected this fall of sufficient manhood and patriotism to override the Administration. The Case bill, if it had been enacted, would not have had much direct effect upon industrial relations on the railroads, because most of the abuses against which it was directed are not yet prevalent on the railroads. The measure would, however, have had an indirectly favorable effect of the greatest importance on railway labor relations, because the impunity of lawless behavior by some unions in other industries is a constant and dangerous competitive force against those unionists and union leaders who are not disposed to violence, to contract violation, and to other flagrantly anti-social behavior.

If it is going to continue to be the government's policy indefinitely to force wage-earners into labor unions against their will, and then to reward them in direct proportion to their violence and contumacy—with due regard to size of membership—how much longer can unions inclined toward peace and acceptance of some re-

sponsibility to the community expect to hold on both to their virtue and to their members?

Mr. Truman's yielding to union pressure in his action repudiating the modest restraints of the Case bill, coupled with his capitulation to the demands of John L. Lewis, calls into question his sincerity in the "emergency" legislation he asked of Congress. In any event his proposals are of no value in correcting the causes of industrial strife. Every Marxist or other totalitarian delights to see industrial, financial, economic, and labor bigness—because "the bigger they are the easier they are to take over." Mr. Truman's nostrum for keeping overgrown unionism from too blatant dictation of the lives of the 126 million Americans who are not union members is to keep these organizations big and powerful, but to give the Administration authority to take over their power when expedient to do so.

This is as if, to deal with a bully armed with a club, a policeman were assigned to him as an escort—a guardian who might, incidentally, not be any safer a citizen than the hoodlum himself. This is the devious, disingenuous and ineffective way of dealing with such a situation. The thing that will really heal such disruption of the peace is to take away the bully's club—i.e., his immunity from the criminal and anti-monopoly laws and his freedom from judicial restraint. That would reduce the fellow to a size where he could thrive according to his merits, instead of according to his trouble-making propensities. Enthusiasts for the 18th Amendment resisted so violently against any mitigation of the abuses to which it gave rise that, in the end, they lost the measure in its entirety. Since it is proving so difficult to get modest reforms in New Deal labor legislation, it may in the end become a less complex, and hence more practicable, political task simply to wipe all this legislation off the statute books.

Turbine Experience

Elsewhere in this issue will be found a brief account of the dynamometer test performance of the London, Midland & Scottish steam-turbine locomotive built in 1935 compared with two reciprocating type steam locomotives which in other respects than the driving mechanism were alike in proportions and capacity. The significant facts disclosed by the comparative results of the turbine locomotive and the reciprocating type are the small differences in both fuel and steam economy. Indeed the results from the turbine locomotive itself, when tested with three different superheater arrangements, showed variations as wide as those between the two types with the same arrangement of superheater. Tested in daylight service on the famous "Royal Scot", the turbine locomotive produced a drawbar horsepower-hour from 2.78 to 2.97 lb. of fuel with a heat value of 14,000 B. t. u., and a water consumption of 22.11 to 24.8 lb. per drawbar horsepower hour.

The best performance of the turbine locomotive was that with a superheater in which the number of elements had been increased from 32 to 40 which raised the initial steam temperature by about 110 deg. F. In his paper before the Institute of Locomotive Engineers referred to by the author of the article in this issue, R. C. Bond, mechanical engineer, Locomotive Works, London, Midland & Scottish, concluded "that the non-condensing turbine locomotive depends for a clear thermal gain upon the use of temperatures well above the maximum that would be practicable with a reciprocating engine in combination with a boiler pressure that can be used in a reciprocating engine only in conjunction with the undesirable complications of compound expansion."

If the mechanical features of the directly connected steam-turbine drive of Pennsylvania locomotive No. 6200 prove the success that their first 40,000 miles suggests that they may, a logical further step will be the improvement of the thermal efficiency by the increase of the initial steam pressure and temperature, as suggested in the quotation above. To go far in this direction will call for a departure from the conventional staybolted firebox construction and will entail an entire new set of problems. Considerable work has already been done looking towards this end, but the end has not yet been attained.

Congress Needs Renovating

The Senate has passed, with some amendments, a bill for the reorganization of Congress which was proposed some months ago by a joint Senate-House committee after prolonged study. The general principles of this legislation are thoroughly sound—but it is certainly to be hoped that the House, if it passes the bill, will amend its provisions for dealing with transportation questions, since these provisions are illogical to the point of imbecility; fully as bad, indeed, as the present dispensation.

But let's not decide that the new superintendent will never make the grade just because he doesn't yet know the road on our end of the line. If the committee which wrote this report (Senator La Follette and Congressman Mike Monroney were, respectively, chairman and vice-chairman) could be induced to turn loose the same degree of study and common-sense on their provisions regarding transportation as they have on the main body of the report, then these imperfections as to detail would be quickly corrected. Meantime, the welfare of the whole country—including the transportation industry, its employees, and its customers—acutely needs the enactment of the general principles of this measure.

Here is the situation which this legislation is designed to correct, as expressed in the committee's own words:

"Our committee was created in response to a widespread congressional and public belief that a grave constitutional crisis exists in which the fate of representative government itself is at stake. Public affairs are now handled by a host of administrative agencies headed by nonelected officials with only casual oversight by Congress. The course of events has created a breach between government and the people. Behind our inherited constitutional pattern a new political order has arisen which constitutes a basic change in the federal design. Meanwhile, government by administration is the object of group pressures which weaken its protection of the public interest.

". . . . While the Constitution directed the separation of powers between the executive and legislative branches, it did not intend them to go separate ways and in opposite directions. Each year the gulf between Capitol Hill and the departments widens. And without effective legislative oversight of the activities of the vast executive branch, the line of democracy wears thin. Only one man out of the 3,000,000 federal employees is elected by and is responsible directly to the people."

Anyone with any knowledge of Washington, and

innocent of subversive opinions, must say "Amen" to these observations. Congress, which is supposed to be the boss and to lay down general rules for the behavior of the executive department, is in the position of the indulgent father who has set his son up in a business supposedly too complex for the old man to master, giving him a free hand and financing his deficits. The old gentleman is worried at the way things are going. He doesn't want to close his boy out, but he sees plenty of things he neither approves nor understands. He is uneasy at what is happening to his bank account, and at the bossy way the boy treats him.

What is happening, of course, is that the administrative branch of the government is ceasing to be a servant of the people and is becoming their master—as witness, for example, the large-scale professional pressure group attack conducted recently by the O. P. A. against Congress when the legislators began to resent the ineptitude and worse of that bureau.

In general, the remedy embodied in this proposed legislation is that the committees of Congress be reconstituted, reduced in number, and "streamlined," with the duties of each so clearly defined that any bill introduced would automatically go to a definite committee. Moreover, each committee would be given funds to provide itself with a permanent staff, expert in the committee's subject matter—so Congress would not have to depend upon "hand-outs" from administrative departments, lobbyists, and ideological radio and newspaper commentators for its opinions on important legislation. There is more to the proposal than this—in fact the measure has been largely identified in the press as a scheme to increase Congressional salaries—but the provision of more competent committee procedure is the really fundamental recommended reform.

When is comes to dealing with transportation the reorganizers have set themselves out at a blind siding. They propose grouping all river and harbor work, highway construction, and the provision of air transport facilities in public works committees of both houses—while in the Senate they would have the interstate commerce committee spread its talents to include the unfamiliar assignments now covered by the committee on manufactures. The House interstate commerce committee would remain as it is, neither acquiring nor losing any responsibilities.

What all this means is that the present illogical and economically ruinous legislative separation of transportation activities by government (i.e., waterways, highways, airports) from those carried on by private enterprise (railways, buses and trucks, airlines, water lines) would be perpetuated. As discerning as these students of legislative reorganization have shown themselves to be in other respects, they have failed to detect the urgent necessity for harmonizing the aspects of transportation provided under public auspices with those entrusted to private enterprise. Conversely, they have failed to perceive the essential distinction between "public works" which involve direct government participation in economic activity, and such works as public buildings for the exercise of government functions which in no way invade the field of private enterprise.

To draw attention to the myopia of the committee in this area of its inquiry is no mere quibble—the fault is a serious one; it cries out for correction, whether the proposed reorganization is carried out or not. Still, every transportation man is an American before he is a transportation man—and it would be a lot better to continue carrying on the transportation business under heavy and stupid political handicaps than to have America itself go to the bureaucratic dogs, as practically all of the rest of the world has done. The main features of the proposed Congressional reform, therefore, deserve the study and support of transportation people; and they had better get behind the whole proposal as it is, despite its imperfections, if the alternative is to be no Congressional reorganization at all.

Money Down the Sewer

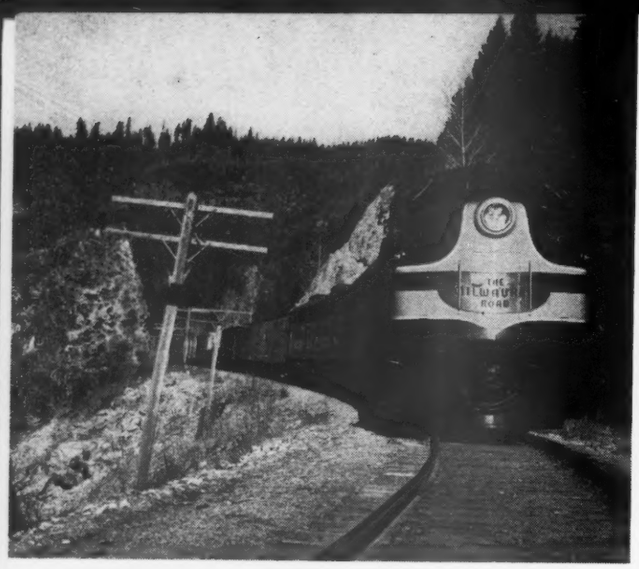
Perhaps the rapid increase in loss and damage claims that occurred during the war was unavoidable, but with most of the experienced employees now returned to the railways from military service, such a continuing increase is hard to understand. It represents millions of dollars of revenue losses—and freight claim prevention officers must have executive support to accomplish anything in the way of reducing this intolerable waste.

It cost the railways $16.71 in claim payments for every $100 of revenue to handle sewer pipe, and on the same basis it cost $12.98 to handle melons. The figures on fresh fruit, melons and vegetables are particularly unsavory, the loss and damage per car of these commodities having risen from the very high figure of $9.31 in 1944 to $13.58 in 1945.

The railways paid out $2,138,259 in claims on the 115,508 cars of oranges they moved in 1945. They paid $1,137,120 on 35,090 cars of tomatoes and $1,093,600 on 68,282 cars of lettuce. They paid out nearly a million dollars on 36,530 cars of peaches, and losses on cantaloupes and watermelons each accounted for more than half a million dollars.

The significant and alarming factor is that on every single variety of fresh fruits, melons and vegetables the claim payments increased steeply in 1945 as compared with 1944. The greatest percentage increase was shown on the 36,066 cars of onions where damage payments jumped from $1.88 per car to $9.13 per car. In all, $5,488,491 was paid out in claims on the 599,118 cars of fresh vegetables handled. More than $3 million was paid out on grain and on fresh fruits, excluding citrus. More than $2 million was paid in each of the categories: citrus fruits, melons, livestock and canned food products. More than $1 million was paid out on flour, eggs, coal and coke, and new furniture. Nearly $5 million was paid out on the shipments of ale, wine and beer.

The total figure of $75,971,817 in freight loss and damage in 1945 for Class I carriers is a danger signal which the railways simply cannot afford to ignore. The Freight Claim Division of the Association of American Railroads is not ignoring it, and is taking a number of corrective measures. However, the unfortunate situation has grown to such proportions that the most effective means for correcting it require executive attention on the individual railroads—to insure that freight claim prevention officers are given the necessary backing by all departments to stop this wholesale throwing of money down the sewer.



The Milwaukee's Lines West were called upon to handle much freight to the Pacific Northwest

Steam, Diesel and Electric Power Combine to Handle Increased Traffic

The western lines of the Milwaukee Road accommodated heavy war-time business through alert power distribution and utilization

This is the third of a series of articles on how the lines to the Pacific Northwest met the test of vastly increased freight and passenger traffic and were never pushed to the breaking point despite the heavy load. An article on the Great Northern's operations appeared in the *Railway Age* of March 2, page 440; and on the Northern Pacific's operations in the issue of May 4, page 913.

THE average gross ton-miles handled by Lines West of the Chicago, Milwaukee, St. Paul & Pacific amounted to 251,845,000 per month in 1932. In May, 1945, the total was 1,071,912,000. The actual locomotive-miles did not show anywhere near a comparable increase, and the utilization of available locomotives is graphically illustrated by the figures of gross tons per locomotive-mile as shown in the accompanying table.

The Lines West of the Milwaukee comprise that portion of the railway west of Mobridge, S. D., or, in other words, west of the Missouri river, and include the main line to Seattle and Tacoma, as well as several branches in South Dakota, North Dakota, Montana, Idaho and Washington. They include also two detached subdivisions, one on the Olympic peninsula and the other in northern Washington, which have no direct physical connection with the rest of the Milwaukee lines but are reached by car ferries operated by the Milwaukee on Puget Sound. Lines West comprise four operating divisions. They also include a section of electrified line over the Rocky mountains, 440 miles in extent, and a further electrified section through the Cascade mountains, 216 miles long.

The main line of the Trans-Missouri division extends from Mobridge, S. D., to Harlowton, Mont., 530 miles. The ruling grade on this division is one per cent for a stretch of 15 miles in North Dakota. Apart from this there are no grades greater than 0.6 per cent on the entire main line of this division. The main line climbs from an elevation of 1,653 ft. at Mobridge to 4,167 ft. at Harlowton. The steam freight engines used consist largely of two types, the 2-8-2 with a tractive effort of 62,949 lb., used exclusively in freight service, and the 4-8-4 type with a tractive effort of 70,816 lb., used in either passenger or freight service.

The main line of the Rocky Mountain division extends between Harlowton, Mont., and Avery, Idaho, 440 miles, and is electrified throughout. As might be judged from its name, it traverses the Rocky mountains, as well as the Belt and Bitter Root mountain ranges, and the grades and curvature are typical of the railroads in this region. The ruling grade on this division is 2.0 per cent. Out of Harlowton, at 4,167 ft., the Belt mountains are immediately crossed, the high point being at Loweth, 5,798 ft. After dropping down to under 4,000 ft., the line crosses the Continental Divide just east of Butte at an altitude of 6,347 ft. The summit of the Bitter Root mountains is encountered just east of Avery, which is traversed by the St. Paul Pass tunnel at an altitude of 4,170 ft. For many miles the line traverses canyons, notably Montana canyon, and the curves are necessarily frequent. The main line freight and passenger service on this division is handled by General Electric and Westinghouse electric locomotives which, when run in two units, have a tractive effort of 112,750 lb., and when run in three units, have a tractive effort of 169,125 lb.

The Idaho division main line extends from Avery, Idaho, to Othello, Wash., 225 miles. Until road freight Diesel-electric locomotives of 5,400 hp. and a tractive effort of 230,800 lb. were purchased from the Electro-Motive Division of General Motors Corporation and put in operation during the war, this was a steam-operated division between the road's two electrified sections. Its grades are such that the Diesel locomotives, for example, have an eastward tonnage rating from Othello to Avery of 6,800 tons.

The main line of the Coast division extends from Othello, Wash., to Black River, Wash., 179 miles, and also from Black River to Seattle, 10 miles, and Black River to Tacoma, 29 miles, the entire main line being electrified. The ruling grade on this division climbing the eastern slope of the Saddle mountains out of Beverly, Wash., is 2.2 per cent. The main line freight and passenger service is handled by electric locomotives built by the General Electric Company, having a tractive effort of 112,750 lb. for two-unit motors and 169,125 lb. for three-unit motors. For main line freight service on this division, 2-6-6-2 Mallet locomotives, with a tractive effort of 82,720 lbs., supplemented the electric locomotives during the period of exceptionally heavy westward business.

Electric Locomotive Utilization

The war-time problem of handling vastly increased traffic over a single track railway became largely a matter of securing adequate power under circumstances where two long electrically-operated divisions alternate with two steam-operated divisions. The fact that no new locomotive units had been purchased for the electrified lines since the electrification was completed in 1912 added to this problem. The Milwaukee owned 84 electric locomotive units, or one less than was available to handle the traffic of World War I. Any transfer of electric units between the two separate electrified sections was impractical because, first, the traffic was so heavy on both sections that all electric locomo-

tives could be used to advantage and, second, any such transfer would have involved hauling the units deadhead across 216 miles of steam-operated lines. Shops situated at Tacoma, Wash., and Deer Lodge, Mont., speeded up the repairs to the intensively employed electric locomotives, and the shop forces were successful in reducing the time required per locomotive for repairs.

Steam Locomotive Utilization

Even the rearrangement of electric locomotives to supply greater tractive effort did not give adequate power to the electrified sections, and this was particularly true on the Rocky Mountain division. Between Avery and Deer Lodge, 212 miles, there were enough water stations left that could be rehabilitated quickly and put in service so that steam locomotives could be operated upon occasion over this portion of the electrified section to supplement the electric locomotives. Coal chutes were not available, so the steam locomotives used to supplement the electric engines were oil burners.

On the electrified section between Deer Lodge and Harlowton, 227 miles, there were not enough water stations available for through steam locomotive operation. However, on several sections of the line where helper service was necessary, it was possible to augment the electric motors used as helpers with steam helpers, thus conserving the number of electric units available for through freight service.

Diesel Locomotive Utilization

Although the Milwaukee had only four of the 5,400-hp. road freight Diesel-electric locomotives on Lines West, their operation played a disproportionately large part in the over-all picture of efficient locomotive utilization. They were assigned to main-line freight service on the Idaho division. However, since this division connected with electrified sections at both its eastern and western ends, the Diesels were frequently run through over the electrified sections. There was no difficulty in doing this as, of course, the Diesels did not require wayside facilities.

Also it was found on the electrified section, even where facilities for steam locomotives were available, that the employees, after more than 30 years of operating electric locomotives, either had forgotten what they knew about running steam locomotives or else had never run a steam locomotive. In running steam locomotives over the electrified section, it was necessary to increase road foreman supervision. Thus the operation of the Diesel locomotives was much more flexible than that of either the steam or the electric locomotives, and enginemen experienced in operating electric motors required a minimum of instruction in operating the Diesel power. During periods of heavy troop movement the Diesels could be equipped with heater cars and used to handle troop trains without electric or steam power.

The Milwaukee handled many troop trains throughout the war, but was called upon for a tremendously increased effort in this direction last winter when the veterans began returning from the Pacific in large numbers. From an average of two troop trains per day handled in September, 1945, the Milwaukee was compelled to step this up often to eight trains per day eastbound in December, 1945. These heavy movements continued well into January, as is indicated by the superintendent of transportation's statement for one day shown in the accompanying table. These are eastbound trains only; on this same day there were five trains of empty troop equipment moving west and one loaded troop train.

One Day's Troop Trains

MAIN 50997—16 cars arrived Othello 2:50 a.m. January 8

MAIN 51306—10 cars, departed Seattle 8:35 p.m. January 7, passed Boylston 3:50 a.m. January 8

MAIN 50996—8 cars, departed Tacoma 8:10 p.m. January 7, passed Boylston 4:01 a.m. January 8

MAIN 51132—10 cars, departed Seattle 10:30 p.m. January 7, passed Kittitas 4:15 a.m. January 8

MAIN 51305—14 cars, departed Seattle 4:05 a.m. January 8

MAIN 51469—13 cars, due from S. P. & S. about 10:00 a.m. January 8

MAIN 51003—1 troop kitchen, 5 troop sleepers, 6 tourists, leave Tacoma yard about 5:00 p.m. January 8

MAIN 51370—1 kitchen, 7 tourists and MAIN 512, 1 kitchen, 5 coaches, total 14 cars in consolidated train, leave Seattle about 11:00 p.m. January 8

The real key to the successful solution of the power problem on the Lines West of the Milwaukee was constant supervision. This started at the top. Since the matter of power distribution was far more than merely a divisional problem the organization of the general manager of the Lines West was unremitting in the constant study of power availability and power needs and spoke either personally or by telephone every day with superintendents, trainmasters and chief dispatchers. Thus, in effect, every steam or Diesel-electric locomotive on Lines West, regardless of division assignments, was a part of the power pool of Lines West and could be used either on the steam-operated sections or to relieve the overburdened electric locomotives when necessary.

An interesting factor in the handling of the Pacific Northwest traffic was the complete cooperation between the operating and transportation officers of the four railways serving that territory. These men, representing the Milwaukee, the Great Northern, the Northern Pacific and the Union Pacific, got together for lunch frequently and worked out many joint problems to their mutual benefit. For example, a huge government warehouse was built at Auburn, Wash., 21 miles south of Seattle, where transcontinental freight was stored awaiting transshipment to boats in the Seattle dock area. In peace-times the rule was that such freight would have to be handled from Auburn to Seattle by the railway which hauled it into Auburn from the East, but this rule was cancelled. The Seattle dock area was divided into zones and each zone was assigned to one railroad as the switching line, after which all freight moving from Auburn to Seattle was handled by the railroad that switched the zone to which it was destined, regardless of what line had brought it in from the East. This method of handling saved innumerable switching locomotive-hours, avoided delays to war-time freight, avoided clogged interchange tracks and, as a matter of fact, was a potent factor in keeping the port of Seattle open and unblocked during an extremely trying period.

To help out on the manpower situation, the Milwaukee, in cooperation with the Northern Pacific, Great Northern and Union Pacific, jointly sponsored with the War Manpower Commission and the Seattle Board of Education a training school for brakemen, firemen and switchmen. A two weeks' course was given and the records show that 634 men, graduates of the training school, entered the service of the four lines mentioned during the period, June 19, 1944, to September 8, 1945, while the school was in operation. From May 24, 1943, to October 24, 1945, the Milwaukee also maintained as its exclusive operation a school at Miles City, Mont., for training telegraphers, and 136 students completed the course and entered the road's service.

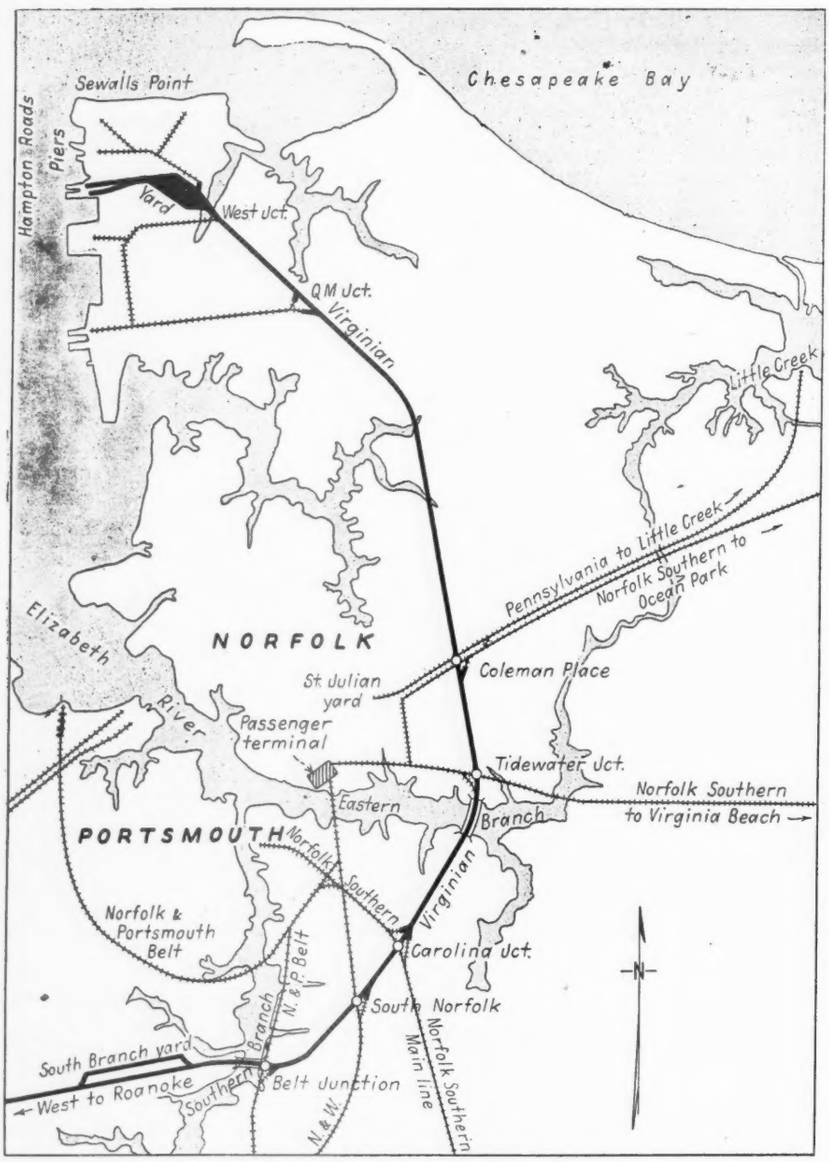
Milwaukee Lines West Statistics for May, 1945, and the Average Month for the Year 1932

Year	Month	Class	Gross Ton-Miles	Locomotive-Miles: Actual	Locomotive-Miles: Based on 2-Unit Motors	Gross Tons Per Locomotive-Mile: Actual	Gross Tons Per Locomotive-Mile: Based on 2-Unit Motors
1945	May	Electric	430,572,000	167,964	214,040	2,563	2,012
1945	May	Steam	641,340,000	299,965	299,965	2,138	2,138
1945	May	Total	1,071,912,000	467,929	514,005	2,291	2,086
1932	Average	Electric	87,524,000	52,433	57,004	1,669	1,535
1932	Average	Steam	164,321,000	112,797	112,797	1,457	1,457
1932	Total		251,845,000	165,230	169,801	1,524	1,483

Five Interlockings at Norfolk

Virginian makes extensive signaling improvements relieving train congestion over a large terminal area

THE Virginian has recently renewed three interlockings and installed two new ones, as well as 14 miles of automatic block signaling, in the vicinity of Norfolk, Va., which is the eastern terminal of this railroad. As shown in the map, the main line of the Virginian approaches from the west to South Branch yard, and then circles to the east of the city and on to Sewalls Point, which is the location of piers for loading coal into ocean-going ships. The distance between Sewalls Point terminal and South Branch yard is 14 miles, and in this territory the Virginian crosses two navigable streams and five railroads. The track is practically level, and the curvature is light. Incoming eastbound trains handle the coal tonnage and outgoing westbound trains return the empties to the mines. Two scheduled merchandise freights and one passenger train are operated in each direction daily.



Map of the vicinity of Norfolk showing the locations of the five new interlockings at South Branch draw, Carolina Junction, East Branch draw, Tidewater Junction and Coleman Place

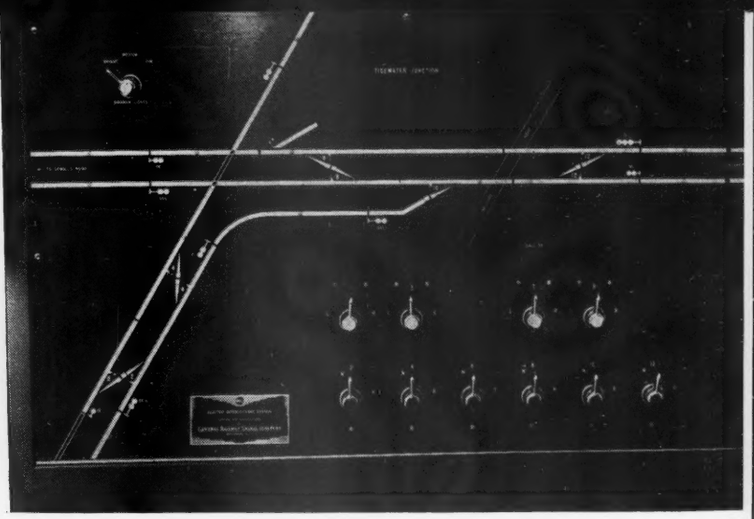
The five new interlockings are of the electric type with all-relay control circuits and panel control machines. Each panel includes an illuminated track diagram with lamps which indicate track occupancy. The signal levers are in the top row, and the switch and crossover levers in the bottom row. The signals at these five new interlockings are the searchlight type and the electric switch machines are the Model 5A with motors rated to operate on 110 volts d. c.

The Coleman Place interlocking is located east of the business section of Norfolk, and about 6.3 miles west of Sewalls Point. At this point the double-track main line of the Virginian crosses two main tracks of the Norfolk Southern, one track being operated by the Pennsylvania under trackage rights. For years there has been no protection at this crossing, and, therefore, all trains were required to stop and whistle before passing.

Coleman Place Interlocking

The Norfolk & Portsmouth Belt Line operates over the Virginian tracks between Carolina Junction and West Junction, and operates over the Norfolk Southern and the Pennsylvania between Coleman Place interlocking and Little Creek terminal. About 20 freight trains of the Belt Line pass through Coleman Place daily. The track of the Norfolk Southern through Coleman Place interlocking extends from Norfolk to Ocean Park on Chesapeake bay, and then south along the shore of the Atlantic ocean to Virginia Beach. This line handles about 6 trains daily. The Pennsylvania, between St. Julian yard and the ferry slips on Little Creek, operates over the Norfolk Southern main track through Coleman Place. About 18 transfer trains are operated daily. The Virginian operates 25 to 30 trains daily through Coleman Place. Also, numerous interchange movements are made, being as high as 300 cars in one day.

Prior to the installation of this new interlocking all trains were required to stop before passing over this crossing. Trains being diverted to the Norfolk Southern from the Virginian, or vice versa, were required to stop and operate the hand-throw stands on the crossovers



Left—Signals for either-direction train operation on both tracks. Right—The panel of the new interlocking control machine at Tidewater Junction

and switches. The elimination of these train stops has been an important factor in reducing delays to trains.

Tidewater Junction Interlocking

At Tidewater Junction, 1.4 miles west of Coleman Place, the double-track main line of the Virginian is crossed by a single-track main line of the Norfolk Southern, which extends from the passenger terminal in Norfolk eastward through Tidewater Junction to Virginia Beach, where it connects to form a loop with the line which crosses the Virginian at Coleman Place. The track layout at Tidewater Junction includes an interchange connection so that passenger and local freight trains of the Virginian are routed over the Norfolk Southern between Tidewater Junction and the passenger terminal, as well as the Virginian freight terminal in Norfolk. Previously, the layout at Tidewater Junction was protected by a General Railway Signal interlocking, in service since 1906. Rather than replace this old plant in kind, a new all-relay plant was installed.

Formerly no interlocking protection was in service on the drawbridge over the eastern branch of the Elizabeth river. Trains approaching this bridge were required to operate at slow speed or to stop until the bridge tender gave the engineman a hand signal to proceed. As part of the new program, an all-relay interlocking was installed on this bridge to control the new interlocking home signals and to operate in conjunction with the bridge locks and other safety devices.

At Carolina Junction the Virginian is crossed by the single-track main line of the Norfolk Southern, with interchange connections extending from the Virginian in both directions to the Norfolk Southern. The Norfolk & Portsmouth Belt Line uses the tracks of the Virginian between Carolina Junction and Coleman Place, as well as on to West Junction. Formerly this layout at Carolina Junction was protected with a mechanical interlocking which was in need of replacement. A new all-relay electric interlocking was installed. The Virginian single-track main line extends west from Carolina Junction and crosses the main line of the Norfolk & Western at South Norfolk, which is an electro-mechanical interlocking jointly maintained by the Norfolk & Western and the Virginian.

Drawbridge Interlocking

At Belt Junction, about 1.4 miles west of South Norfolk, the Virginian crosses a single track of the Norfolk & Portsmouth Belt Line. Previously this crossing was protected by a cabin-door plant, including derails on the Belt Line and signals on the Virginian. As a part of the improvement the cabin-door plant was removed, the derails were removed, and the new electric interlocking protection, including four home signals, was installed. These signals are controlled remotely from a machine to be discussed later.

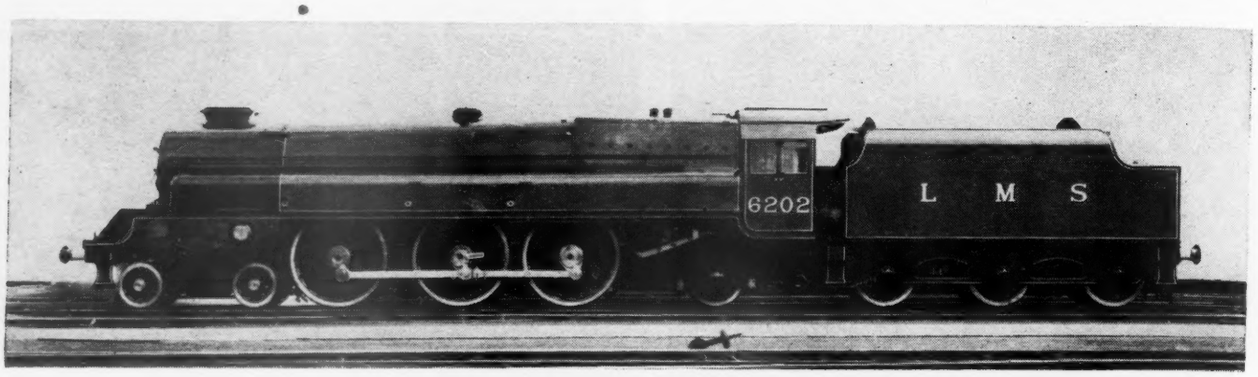
About 1,500 ft. west of Belt Junction the Virginian crosses a drawbridge over the southern branch of the Elizabeth river. Formerly this bridge was protected by an old style electric interlocking, which, as a part of the program, was replaced with a new all-relay interlocking, the control panel of which includes the controls of the new home signals at Belt Junction, which was mentioned above. Also this new interlocking on the southern branch bridge includes the control of a new power switch machine and signals at the east end of the passing siding at South Branch yard, 600 ft. west of the drawbridge.

Between Carolina Junction and Tidewater Junction the signaling and traffic direction locking is arranged for the operation of trains by signal indication in both directions on both tracks. This required the installation of one intermediate location including four signals, the signals between the tracks being dwarfs. New automatic block signaling for single-direction right-hand running on the 6 miles of double track eastward from Coleman Place to Sewalls Point terminal includes 3 eastward signals and 4 westward signals.

The primary objective of this signal and interlocking project was to expedite train movements and thereby relieve congestion in this busy terminal area. This result has been accomplished. Not only do the new interlockings eliminate numerous train stops, but also with the new interlocking and automatic signals, the enginemen are authorized to proceed at normal speeds. This project was installed under the jurisdiction of A. M. Traugott, chief engineer, and under the supervision of A. R. Kyle, superintendent of telegraph and signals, and Edward Lockhart, assistant superintendent of telegraph and signals, who succeeded Mr. Kyle when he retired April 1. The General Railway Signal Company furnished the interlocking and signaling equipment, and performed the construction under contract.

G. W. R. Gardens Going Gay.—Gardening enthusiasts among employees at many Great Western (Britain) stations are busying themselves in their spare time preparing for the company's station gardens competition, which has been organized this year for the first time since 1940. In resuming the presentation of cash prizes and certificates for the best kept gardens, it is hoped to give stimulus to a healthful hobby, the pursuit of which will help towards meeting the public's desire for brighter stations. During the war years, the Great Western encouraged its staff to grow vegetables instead of flowers, a practice which no doubt will continue to some extent until the food situation improves, but it is felt that travelers will welcome now a partial return at least to the attractive floral displays of pre-war.

At some stations, where the character of the layout makes a garden impracticable, hanging baskets will be provided, and the company is offering special prizes for their most effective use.



The non-condensing turbine locomotive built by the London, Midland & Scottish in 1935

Tests of L.M.S. Turbine Locomotive

Built in 1935 to dimensions of reciprocating type Pacifics— The turbine performance is compared with these locomotives

By E. C. POULTNEY

O. B. E.; M. (British) Inst. Loco. E.

THE locomotive forming the principal subject of this article was built in 1935 experimentally at the Crewe Works of the London Midland & Scottish Railway in accordance with the designs of Sir William Stanier, F.R.S., M. I. Mech. E., when chief mechanical engineer, in collaboration with Metropolitan Vickers Electrical Co., Ltd. Except that it is equipped with multi-stage non-condensing turbines, it is similar to a series of four cylinder "Pacific" type express locomotives, of which twelve are in main line fast passenger service, all constructed between 1933 and 1935. They were the first of the "Pacific" type on the L. M. S. Railway.

When the first engine was built at the Crewe Works in 1933 it was intended to construct three for trial purposes. However, as at that time some consideration was being given to the application of a steam turbine in place of reciprocating engines, two only of the four-cylinder design were completed, and the third set of main frames and certain other details were retained for the suggested turbine locomotive. Recently a paper has been read before the Institution of Locomotive Engineers in London by R. C. Bond, M. Inst. C. E., M. Inst. Mech. E., Mechanical Engineer Locomotive Works, L. M. S., entitled "Ten Years' Experience with the L. M. S. 4-6-2 Non-Condensing Turbine Locomotive No. 6202." This paper presents a description of the engine, gives experience with its running, and describes initial difficulties encountered with an entirely new design, and also a very complete record of exhaustive trials carried out with the engine on the road with the dynamometer car when it was run in competition with two of the standard four-cylinder engines. The writer proposes to refer to these trials and offer a few notes on the road over which they were made between London (Euston) and Glasgow (Central), comprising the main trunk route of the Western and Northern divisions of the L. M. S. System.

To appreciate the performance of these locomotives with heavy fast passenger trains a short description of the successful four-cylinder locomotives will be given, followed by some particulars of the turbine engine. In view of the fact that the Pennsylvania Railroad has now completed and put into traffic a notable locomotive incorporating non-condensing turbines these notes of the L. M. S. experimental turbine locomotive will have added interest.

Four-Cylinder Locomotives

The four-cylinder engines were designed by Sir William Stanier in 1933 and are known as the "Princess Royal" class. They were introduced to work more particularly the heavy fast dining and luncheon car trains and the sleeping car traffic between London and Glasgow, and are also employed on fast trains between London, Liverpool, and other places, thus supplementing the 4-6-0 three-cylinder "Royal Scot" class engines designed in 1927. The "Royal Scot" engine, it will be recalled, visited the United States in 1933. The "Princess Royal" class preceded the larger Pacifics of the "Coronation" class brought out by Sir William Stanier in 1938, one of which was exhibited at the World's Fair, New York.

Particulars of the general dimensions of these "Princess Royal" engines are given by the tabulated data, therefore it will be necessary only to refer to the design features of these locomotives, which when built represented a considerable advance in power compared with others previously used by the L. M. S. Railway. The boilers used for the four-cylinder and turbine locomotives are exactly alike, except that the boiler for the latter has a larger superheater, and the main throttle valve is in the dome.

Actually, this engine has been tried with three different superheaters. Superheater A is the size used as standard for the four-cylinder engines. The boilers have Belpaire fireboxes wth a wide grate giving an area of 45 sq. ft. The barrel section is made up of three courses and tapers from a diameter inside of 75 in. to 68⅝ in. outside diameter at the smokebox tube plate. Between the tube plates the distance is 19 ft. 3 in. The inside firebox is of copper in accordance with standard British practice, and has a combustion chamber 39½ in. long. The grate is not rectangular, as is usual, but the foundation ring tapers from an overall width of 81¾ in. at the throat plate to 74⅞ in. at the back plate. This allows satisfactory hand firing in the back corners of the firebox, and also gives rather more space in the cab front plate

for good sized windows. Outside the length of the firebox casing is 102 in.

The boiler barrel and the firebox wrapper plates are of two per cent nickel steel. Feed is supplied by two injectors, one being of Davies and Metcalfe exhaust-steam pattern. Both feed through check valves mounted on the top of the middle barrel course from which the feed water is delivered to internal trays in the top of the barrel, and from thence through the steam space. The main throttle valve of the reciprocating engine is combined with the superheater header in the smokebox. The working steam pressure is 250 lb. per sq. in.

The four cylinders are each 16¼ in. by 28 in. and have 8 in. valves receiving a full-gear travel of 7¼ in. from four sets of Walschaerts motion. The outside cylinders drive the center pair of wheels through main rods 9 ft. between centers, and the inside pair placed well forward over the leading axle of the front truck drive the leading coupled wheels through a balanced built-up crank axle by means of main rods 8 ft. 6½ in. centers. Adjacent cranks on each side of the engine are on opposite centers, the pairs being placed at 90 deg. with each other.

The method of lubricating the valves is interesting. Cylinder and valve lubrication is provided by a mechanical lubricator, and there are eight feeds to the four-cylinder barrels and a further eight to the eight valve heads. The oil fed to the cylinders and valves passes through a steam atomizer, and in the case of the valves the oil is fed into annular spaces formed in the valve casings and behind the valve bushings. The atomized oil passes from these cavities through six small holes equally spaced round the bushes at the inner ends in the live steam space between the valve heads. This lubricating system combined with the use of six narrow packing rings for each valve head has been most successful in reducing carbon deposits, and wear has been minimized by the efficiency of the lubricating arrangement. Steam leakage has also been reduced to negligible proportions.

Table 1—General Dimensions L. M. S. Locomotives

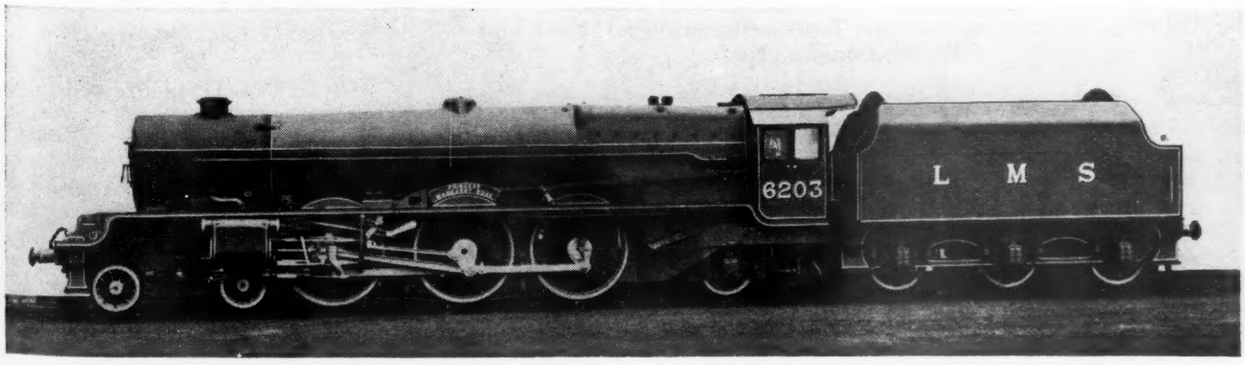
Class	Princess Royal	Turbine
Type	4-6-2	4-6-2
Nos.	6210 and 6212	6202
Service	Express passenger	Express passenger
Rated tractive force at 85 per cent, lb.	40,300	40,300
Weights in working order, lb.:		
On drivers	150,080	154,448
Total engine	234,080	247,632
Tender, loaded	122,416	122,416
Wheel bases, ft.-in.:		
Driving	15-3	15-3
Engine, total	37-9	37-9
Engine and tender	63-10	63-10
Driving wheels, dia., in.	78	79
Cylinders, number, dia. and stroke, in.	4-16¼ x 28	Metropolitan-Vickers turbine, 2,600 hp. at 62 m.p.h.
Valves, dia., in.	8	
Boiler:		
Steam pressure, lb. per sq. in.	250	250
Diameter first ring outside, in.	68⅝	68⅝
Flues, number and dia., in.	32-5⅛	40-5⅝
Tubes, number and dia., in.	112-2¼	81-2¼
Fire area tubes and flues, sq. ft.	537	541
Length between tube plates, ft.-in.	19-3	19-3
Outside superheater elements, in.	1¼	1
Grate area, sq. ft.	45.0	45.0
Heating surfaces, sq. ft.:		
Firebox and comb. chamber	217	217
Tubes and flues	2,097	1,951
Evaporative, total	2,314	2,168
Superheater	653	832
Combined	2,967	3,000
Tender capacity:		
Coal, lb.	22,400	20,160
Water, Imp. gal.	4,000	4,000

Note: The turbine locomotive was tested with three types of superheater—A, B and C. The boiler dimensions shown above for the Princess Royal include the A type and those for the turbine the C type. Both the B and C types have the same number of units. The B type are bifurcated and provide 577 sq. ft. of superheater surface, while the C type units are triple. When tested with the A type superheater, the boiler heating surfaces of the turbine were identical with those of the reciprocating locomotives.

The coupled wheels are 78 in. in diameter and have rims of triangular section. The leading truck has bar frames and a center casting which receives the center pin. However, the weight is not taken at the center, as is usual practice, but by side bolsters which take the weight direct from the engine main frames. Lubrication is provided both for the bolsters and the cup sliding faces. Lateral movement is controlled by coil check springs. The trailing two-wheel truck is of the Bissel type, and here again the transmission of weight from the main frames is by means of sliding bolsters which are arranged inside the truck wheels instead of outside, as is the case with the leading truck. Mechanical lubrication is fitted for the coupled axles journal boxes; and all axle boxes have underkeeps equipped with oil pads with worsted feeders which feed the pads from the oil reservoirs in the underkeeps.

Between London and Carlisle, a distance of 299 miles, there are nine sets of water troughs. The average spacing between troughs is about 31 miles, so that only a moderate tank capacity is necessary. North of Carlisle there are water troughs near Floriston and Carstairs, 6 miles and 73.5 miles from Carlisle, respectively. The distance from Carlisle to Glasgow and to Edinburgh is about 100 miles in each case. The standard brake arrangement comprises steam brakes on the engines (coupled wheels only) and tenders, and the automatic vacuum brake on the train. Application of the vacuum brake automatically applies the engine and tender brakes.

With the exception of the turbine for



The "Princess Royal" Pacific type locomotives similar in dimensions and capacity to the turbine locomotive

forward and backwards running, together with the attendant gearing and control mechanism, the turbine engine closely resembles the standard four-cylinder locomotives. The main framing and running gear are as for the standard engine, except that all axles of the engine and the tender have Timken roller-bearing journal boxes. So far as wheel sizes and wheel bases are concerned, this engine is exactly the same as the standard locomotives.

Turbine Equipment

The turbine equipment consists of two Metropolitan-Vickers Ljungstrom non-condensing turbines using superheated steam at a nominal pressure of 250 lb. per sq. in. The forward turbine on the left side of the engine is of 2,600 nominal hp. It has 16 stages and the blading arrangement is such that high efficiency is maintained over a wide range of speed. This turbine is permanently connected to the leading coupled axle through triple-reduction gearing, giving a ratio of 34.4 to 1. The turbine speed is 13,500 r.p.m. at 90 miles per hr. The reverse turbine on the right side is smaller than the forward running turbine and drives through an additional single reduction gear, the overall ratio being 77 to 1. This turbine is normally out of gear with the main train of gears. The center line of the additional reduction gear is co-axial with the high-speed pinion of the main gear transmission, with which it is engaged by means of a splined shaft and hand-operated dog clutch. Ratchet inching mechanism is fitted to enable the clutch to be engaged should it happen that the edges of the teeth of the two parts of the clutch are opposite each other when it is desired to engage the back-up turbine.

The main triple-reduction gearing is made up of double helical gears meshing with the low-speed gear wheel which surrounds the main driving axle and is connected to two arms, forged solid with the axle by means of four pivoted links and a yoke, which also surround the axle in such a manner that relative motion between the gear and the axle is freely permitted. This gear wheel runs on hollow trunnion shafts or quills running in white metal bearings in the casing which houses all the driving gears, and is carried by a three-point suspension from the engine frames. Power is transmitted from the slow-speed gear rim through laminated springs arranged circumferentially round the wheel.

The high-speed pinion connects with the turbine shaft through a hollow quill shaft and two diaphragm couplings to give flexibility to the drive. The first reduction gears are allowed a limited transverse movement on the shaft to insure an even loading on the gear teeth. It will be realized that the forward running turbine is always in gear, therefore when moving in reverse gear a small amount of steam is supplied to its casing from the back-up turbine to insure proper cooling.

The lubrication system fitted is very extensive and is actuated by a closed force-feed arrangement in which three pumps draw oil from a sump integral with the gear casing and feed it under pressure to all bearings and through sprayers to the gear teeth. One pump is a reversible gear pump driven by the low speed gear. It thus works only while the engine is in motion, and the oil delivered depends on the speed of the engine. Two other pumps are of the steam-driven reciprocating pattern by Worthington-Simpson. These supplement the oil supply from the gear pump, and also operate when the engine is standing to provide oil to carry away heat conducted along the turbine shaft. The oil supply from the gear pump and one of the steam pumps passes through a cooler of the air radiator type, and then to the forward turbine bearings and the gear train bearings. It sprays whether the engine is running forward or backward. Oil feed from the second steam pump flows to the reverse turbine only, which also receives a supply from the other two pumps when this turbine is in gear.

Steam supply for the forward running turbine passes through a strainer and then through one or more of six valves controlled by hand from the cab. The valves are opened in succession, the number passing steam at a time depending upon the power required. The reverse turbine has three valves. Both sets of valves are operated by one handle in the cab. Rotation clockwise opens the valves for the forward turbine and in the other direction steam is admitted to the reverse turbine. These valves cannot be opened unless the reversing clutch is properly in gear, also the forward turbine valves cannot be opened while the backwards running turbine is in gear, and reversing cannot be effected unless the engine is stationary.

There are two injectors for boiler feed, one of which is a Davies and Metcalfe exhaust-steam injector. This injector is arranged in series with a feed heater using steam bled from the forward turbine. It has a capacity of 19,000 to 36,000 lb. per hr. When feeding direct the temperature of the feedwater is 190 to 200 deg. F. and when using the supplementary heater the feed temperature is about 275 deg. F., resulting in an additional economy in coal consumption of 3 to 4 per cent. When considering the coal consumption for the standard engines as against the turbine locomotive this special heater arrangement must therefore be kept in mind.

The turbine engine has a double chimney and two blast pipes. When first built the area through the exhaust nozzles could be varied by sliding sleeves operated by a cam on the forward turbine steam valve spindle, the arrangement being such that the area through the blast pipes could be increased or decreased to an extent dependent upon the number of steam valves open. Experience has shown this arrangement to be quite unnecessary and the engine now operates in a very satisfactory manner with the blast pipe nozzles fixed in the minimum area position. The area through the two blast pipe caps is 31 sq. in. and with four steam valves open the exhaust steam pressure is about 3 lb. per sq. in. and the smokebox vacuum is approximately 1 in. for each valve open.

Table 2—Dynamometer Car Tests—Summary of Coal and Water Consumption

Route	LONDON-GLASGOW-LONDON				
Locomotive	Standard four-cylinder		Turbine		
Locomotive No.	6,212	6,210	6,202		
Superheater type	A	A	A	B	C
Total miles	1,608	1,608	1,608	1,207	1,608
Total work done, hp. hr.	21,492.8	24,299.3	22,941	19,095.6	24,056.2
Coal consumption, lb.:					
Total	69,124	72,336	68,192	54,508	66,784
Per mile	42.90	44.98	42.4	45.15	41.6
Per db.hp. hr.	3.22	2.977	2.97	2.855	2.78
Water consumption, lb.:					
Total	579,150	599,370	539,450	422,100	595,600
Per mile	361	372.6	342	349.6	371
Per db.hp. hr.	26.90	24.67	24.00	22.11	24.80
Firing rates and evaporations:					
Coal, lb. per hr. per sq. ft. of grate area	50.38	52.21	50.44	54.57	50.7
Water, lb. per lb. coal	8.38	8.298	8.07	7.743	8.93

Where the Tests Were Run

The tests were made between London (Euston station) and Glasgow (Central station), a distance of 401.4 miles, on the "Royal Scot." Northbound from London, with the exception of a short sharp rise for the first mile from Euston up to Camden at 1.43 per cent, trains have a splendid run to Crewe, 158 miles, over ruling grades of about 0.3 per cent. Over the first 82.6 miles to Rugby there

(Continued on page 1185)

Selecting Solicitors Scientifically

Studies of characteristics of successful traffic men make it possible to look for these traits in hiring new men—Collaboration of other railroads is invited

By HENRY DAWES

Assistant to Vice-President, Labor and Public Relations, Kansas City Southern

IN ANY endeavor there are always some men who excel others. Those who excel in one activity may fail in another. This well validated observation indicates the wisdom of selecting men for jobs who have the aptitudes which experience shows to be necessary for success in them.

A good freight solicitor will consistently obtain more tonnage than a poor solicitor. He will do a better job from the start and, after equal training, will still far outstrip the inept solicitor in the amount of business obtained. Yet, generally speaking, the railroad industry has not taken advantage of scientific methods to select men who most likely will develop into first-class solicitors.

The first step is to determine the overall specifications of a good freight solicitor and then to look for these qualities in employing new men. These specifications can be determined by subjective judgment, by statistical analysis of ascertainable facts, and by use of personnel or psychological tests. In the past we have largely limited ourselves to the first of these three methods and have, by means of interviews and knowledge of a man's reputation, attempted to select those who will develop into successful solicitors.

This method could be supplemented by analysis of the facts that can be obtained on an application form, such as age, height, weight, education, etc. Let us learn definitely and conclusively, for example, whether college graduates *actually have been* more successful as solicitors than non-graduates. Personnel tests could also be used to give an objective measure of a man's personality, aptitudes, interests and alertness. After having thus segregated the factors that differentiate between better and poorer solicitors, we can determine by the same measures the degree to which prospective solicitors possess such factors.

More Data Needed

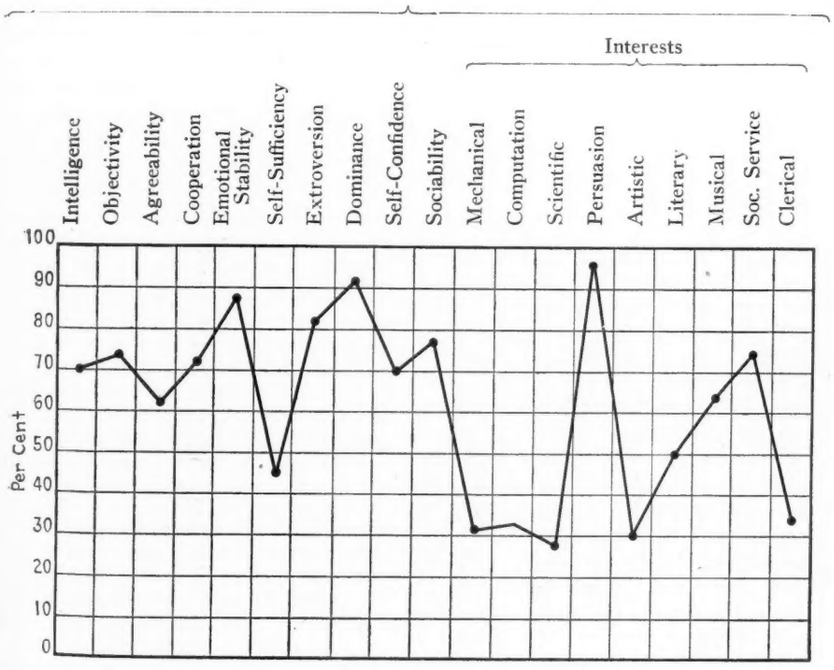
Our conclusions on the Kansas City Southern Lines as to the characteristics of our freight solicitors are tentative. To reach scientifically acceptable conclusions, masses of statistics are needed, and the small number of our solicitors does not permit us to build up such masses of figures. It is hoped that other railroads have or will make similar studies and that a pooling of data will give ample figures for fully validated conclusions.

Much of the information presented on application forms is of no real value in determining the acceptability of an applicant. For example, it was not helpful to know that 88 per cent of our solicitors were married; that they averaged one child, although they came from a family of three children; that only one-third owned their own homes, probably because they moved about so much, having lived for a year or more in three or more towns; or that the average solicitor weighed 171 lb. However, we found that the average height of our solicitors is 5 ft. 10 in., and that, contrary to an often expressed opinion, the tall men do not make the best solicitors.

A greater percentage of those between 5 ft. 7 in. and 6 ft. 1 in. are rated as the "best" solicitors than of the taller or shorter group. We also found that there was a definite relationship between willingness to move and success on the job, and likewise that more of the best solicitors carried life insurance than did the less successful men. The average age of the solicitors was 47 years and 6 months but this item is of little importance in selecting new men.

It was anticipated that habits of a social nature would be indicative of sales personalities and statistics bore this out to some extent. Golf, cards and witnessing sporting events were desirable hobbies; bowling to a lesser extent. Fishing, hunting, woodworking, gardening and stamp collecting were less desirable hobbies.

Average Percentile Score of Solicitors' Personal Traits



How Education Stacked Up

Only a small percentage of our solicitors are college graduates, but it is noteworthy that a greater percentage of these college graduates were rated "best" than among other groups. The high school graduate seemed to have no advantage over those whose education stopped with grammar school. Sixty-eight per cent of our men have attended business schools, night schools or taken correspondence courses but, surprisingly, such extra schooling does not predict success. A great variety of answers was given to the question about school courses liked and disliked, and with more statistics this item may prove to have some meaning.

There was no relationship between success and grades in school, athletic activities, extra-curricular activities or holding office. Whether the men had earned a part of their schooling expenses or not was one of the most informative items on the application blank. Seventy-four per cent of the "best" solicitors, 48 per cent of the "average" solicitors, and only 18 per cent of the less productive solicitors had earned a part of their schooling expenses.

Most of our solicitors have reached their present jobs by way of clerical positions and about 44 per cent have had rather extensive contact with rate matters. We were surprised that there was not a clear relationship between such experience and success as solicitors. Fifty-three per cent of our best men have held full or part-time selling jobs, other than freight solicitation, including jobs held at school, while only twenty-nine per cent of all the solicitors have held such jobs. This gives us a very clear relationship between this factor and success on the job. Forty-four per cent of our men have at one time or another solicited for other railroads, steamship or trucking companies. These men do no better with us than those who have come up through our own organization.

Hazy Judgment Eliminated

These few details are not intended to indicate the individual record of any one of our solicitors. Only enough data have been presented to show what can be accomplished by a thorough analysis of the information on applications. Such analysis eliminates hunches, hazy judgments and personal prejudices in the appraisal of information on application blanks. This preliminary work proves conclusively that the railroads can do as insurance companies have successfully done; i. e., assign definite values or "weights" to the various items on the application blanks. Moreover, it can be done in such a simple manner that anyone in the traffic department can score an application and come to a more correct appraisal of the information thereon than can the most experienced officer who relies on intuition or unsystematized mental calculations.

On the basis of five items only, and the incomplete data at hand, the applications of 61 K. C. S. solicitors were weighted and scored. It was found that 89 per cent of the solicitors rated "best" were in the top half of the scores, and that only 17 per cent of the least productive men were in the top half of the scores. Since the answers to most of the items on the application have to do with presolicitation records or unchanging facts, this means that *the scores on the application form could have been used to predict the success of the men before they were hired*. Furthermore, it means that the weighted application blank can henceforth be used as an integral and valuable part of the selection program. Complete statistics will be furnished anyone who has made similar studies. In the meantime, for the benefit of any statisticians who may be interested, it is pointed out that a coefficient of correlation of .41 was obtained between supervisors' ratings and the scores on the application blanks.

Personnel Tests

Personnel tests may also be used to select new men for solicitation work. Tests are so valuable that there is a danger that those industries where tests are used extensively will syphon off the most employable group of young people, leaving the run-of-the-mill people to those who do not use tests. In competitive industries, the companies that use tests may so improve the quality of their personnel that competition with them may become increasingly difficult. The railroads should take note that many of the major industries of the country have adopted testing as a part of their personnel procedure and that most of our airline competitors are included in this category.

Tests are not playthings, nor are they simple little tricks. However, as soon as they have been proven for a given situation and standards are set up, they can easily be interpreted by any personnel department. The danger lies in not setting up adequate and correct standards; this is the only part of the testing program that requires a specially trained person. The railroad industry is well standardized and once adequate standards were determined for a particular job on one railroad, they could be used for the same job on other railroads. If these standards were set up by an expert, the existing personnel departments of railroads could carry on with a minimum of specialized training.

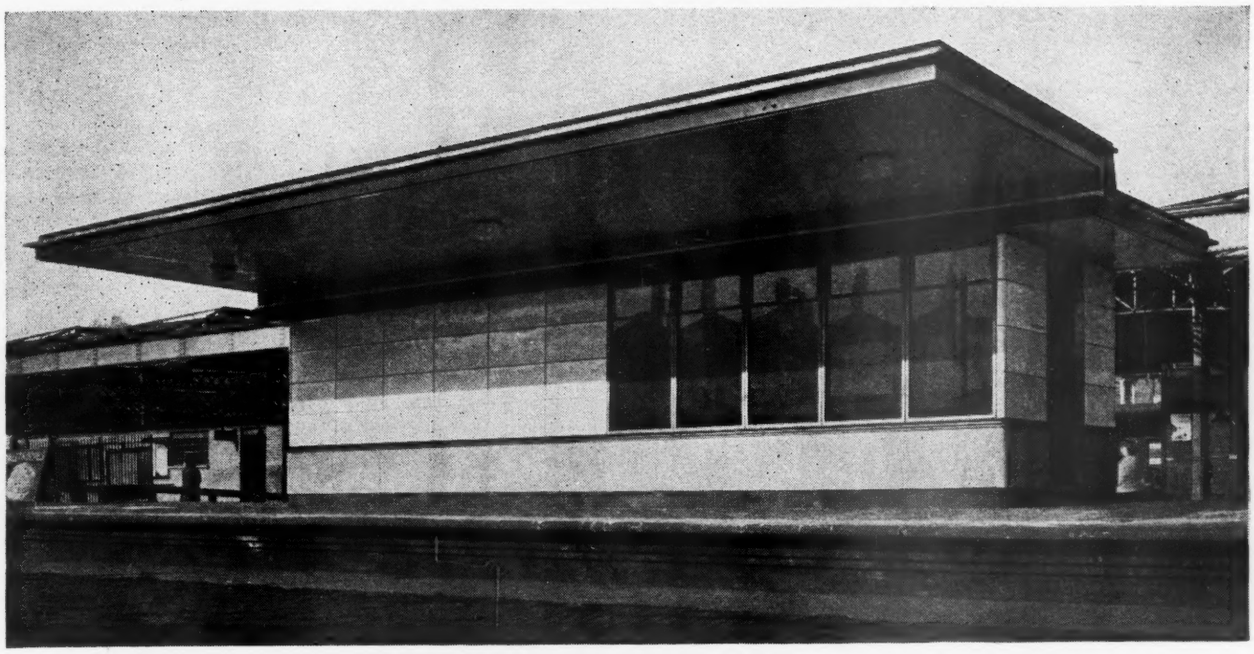
A series of slightly more comprehensive tests has been given to K. C. S. freight solicitors. As was to be expected, they showed up with a distinct pattern of personality traits, and of more importance was the fact that the degree to which solicitors possessed some of these traits was directly related to merit ratings given them by supervisors. A picture of the average freight solicitor as drawn by personnel tests follows: His score on a so-called intelligence test was slightly above the average of the general population. On another test he registered as being more objective, agreeable and cooperative than the average person. On another test, he registered as being emotionally stable, an extrovert, self-confident, social and strongly dominant. He showed a distinct preference for selling and for social service. His interest in music was slightly above average, and for literature was just average. His interest was slightly below average in things mechanical, computational, scientific, artistic, and clerical. A more exact recording of these measurements is presented in the accompanying chart.

As mentioned above, a definite relationship was found between some test scores and success on the job. On one test, for example, the average score for the best solicitors was 77, for the average solicitors 72, and for the least productive solicitors 55. On another test, there was an inverse relationship, the best men averaged 35, the average men scored 42, and the others scored 51. On another test the officers scored 130, the general agents 113, while the average of all officers, general agents and solicitors who took the test was only 103. These figures indicate that the tests can reliably differentiate between the men whose personalities do or do not fit in with solicitation work. Summing up several tests it was found that 84 per cent of the men rated "best" were in the top half of the scores, while 100 per cent of the men rated as the poorest producers were in the bottom half of the scores.

The coefficient of correlation between selected tests and supervisors' merit ratings was .62. The coefficient of correlation between tests, plus scores on applications, and supervisors' merit ratings was .75. This is a satisfactory relationship. We have successfully pinned down the freight solicitor, found wherein the good men consistently differ from the poor men, and have obtained a standard against which newcomers can be measured with a satisfactory degree of accuracy. It means that we can now select the men who have the best chances of being successful on this particular job.

To complete and verify these studies, additional data are required. Collaboration with other railroads which have made or will make similar studies in connection with freight solicitors is hopefully offered. We know that a few railroads have made good progress in the use of tests in connection with other types of personnel. The Illinois Central, in particular, was very helpful to the writer in setting up standards on certain clerical jobs. Yet the work of the railroads in this field is just starting.

THIRSTY LOCOMOTIVES. — London, Midland & Scottish locomotives are among the heaviest drinkers in the world. Their consumption of more than 9,000,000,000 gallons of water a year costs the company something like $1,250,000. To assuage this thirst without stopping the trains the L. M. S. maintains 35 water troughs along the rails at strategic points. The first such trough in the world was installed in 1859 to enable the Holyhead Royal Mail to hold to the schedule guaranteed to the Post Office.



General exterior view of the experimental station unit built by the London, Midland & Scottish

Britain Tries New Type Railway Station

Devised to provide new or temporary facilities quickly, with features of low maintenance, flexibility of construction and high salvage

By WILLIAM H. HAMLIN

Architect, London, Midland & Scottish
London, England

AMONG the important problems confronting the architect when building new railway stations in Britain is how to conduct the work in the shortest possible time so that new premises may be occupied quickly, or, in the case of altering or rebuilding stations, how best to carry out the work to interfere as little as possible with normal station operations.

Traditional building methods require considerable time. Many loads of aggregates and cement for concrete have to be conveyed to the site, as well as of bricks, stone, timber and other materials. Then these must be assembled in small units by a relatively large labor force.

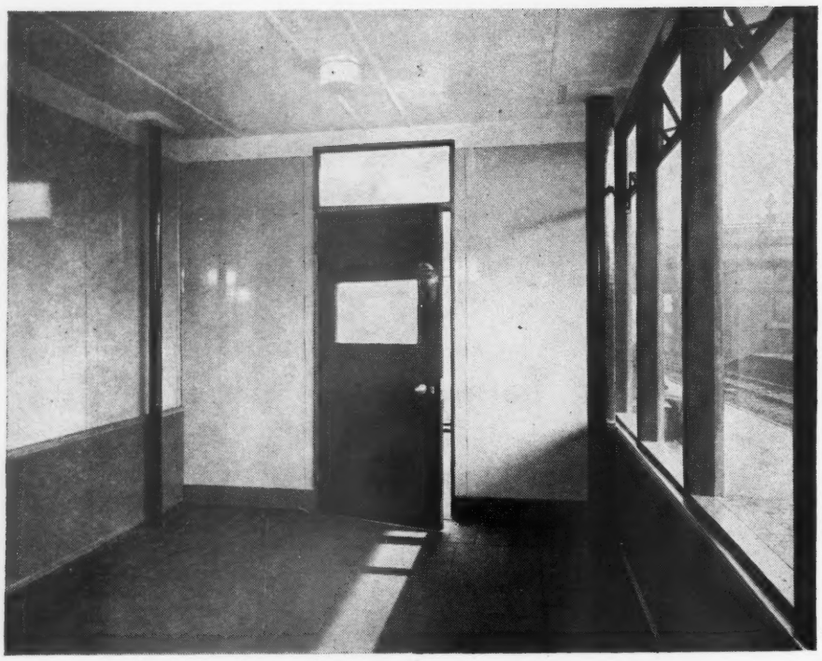
Factory-Made Building

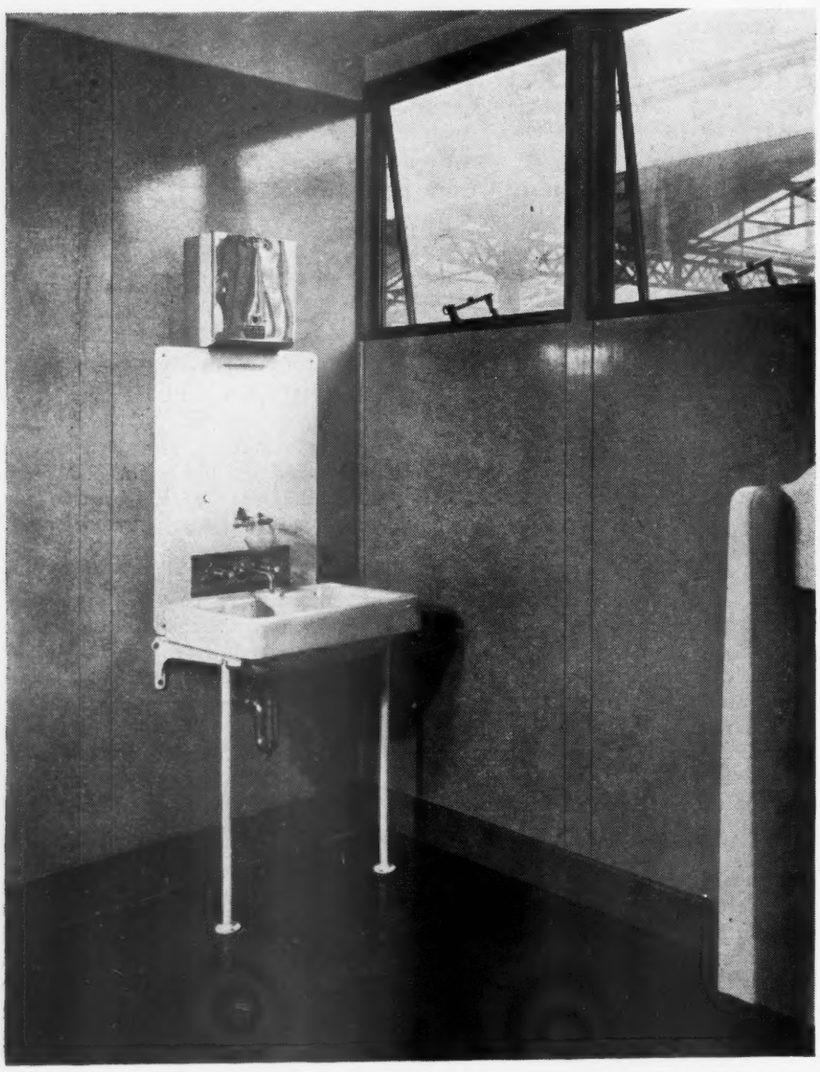
To avoid these disadvantages of traditional methods insofar as possible, the London, Midland & Scottish has recently developed an experimental station building, which also permits the added feature of speed in construction. This building is factory-made from its foundation to the roof and can be erected in one-quarter the time required by ordinary building methods. The comparatively limited time required for assembly removes this type of construction from the sphere of seasonal building and enables assembly to be undertaken in almost any climate or weather conditions. Once the steel frame is erected and the roof fixed, an umbrella is formed under which the operations for completion can proceed. The system is a dry construction involving the use of only a small amount of cement mortar in jointing foundation slabs, or, in a modified design, it can be completely dry.

A second and equally interesting aspect of the design is the reduction which it insures in maintenance, an important economic factor from the aspect of saving both material and labor. This is achieved by encasing the exterior framework of the building with vitreous enameled steel plates, which only require washing at intervals to preserve their new appearance. This material has been used experimentally by the L. M. S. for about 12 years and has been found to withstand the atmosphere about railway stations without deterioration.

The base of the building is composed of concrete slabs, faced with granite aggregate to withstand the impacts and abrasion which appear inevitable about railway stations. Internally, the building is lined with panels of plywood, faced with wood veneer or with metal prepared for painting. If timber is plentiful and steel in short supply, the outside of the building can be covered with resin-bonded plywood panels instead of enameled steel.

Owing to the method of assembly, it is possible to replace any part which may become damaged by accident, without interfering with station operations. A stock of parts can be maintained for the purpose, as well as complete stocks for the construction of new structures.





Above—Interior of the waiting room of the experimental unit, showing general features of construction. Below—The wash room finish lends itself to quick and easy cleaning

Complete flexibility of expansion or contraction is possible with the new design. A building may consist of one unit built of 3-ft. 3-in. panels, or of any number of such units, and the panels are interchangeable. Doors and windows may be inserted or changed at any time, and the entire building may be dismantled and removed to another site.

Flexibility of Construction

The assembly of the building begins with the laying of pre-cast concrete units to form a combined foundation and duct system. The latter is continuous around the inside of the building and carries the heating and drainage pipes. On the foundation are erected steel columns, which support continuous canopy and roof beams, each composed of two steel channels. At the rear end of each beam is a stabilizing member in the form of a 3-in. tubular steel shaft, which may be either in tension or compression, depending on the projection of the canopy over the station platform. Longitudinal steel channels tie the canopy and roof beams together, producing a framework that is light in weight for its strength.

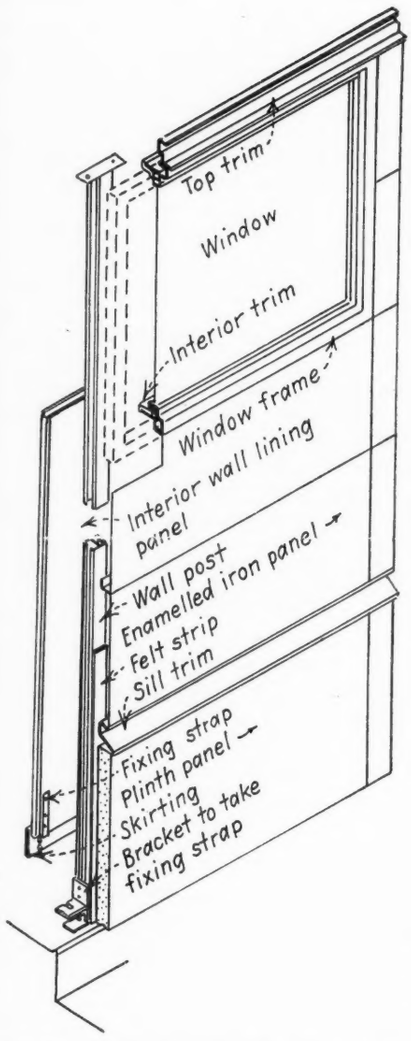
When the main steel frame is completed, the roof deck is assembled. This consists of a series of shallow timber units constructed on the stressed skin principle. It is very light and the underside forms a smooth ceiling ready for painting. The top of the roof is covered with bituminous felt in built-up form.

The next step in the assembly is to erect light steel wall posts on centers of 3 ft. 3 in. These posts consist of two box-channel sections welded back to back, which are connected to the steel roof channels at the top and to brackets attached to the concrete foundation at the bottom. The entire wall panel and window system is connected to these posts by steel clips.

Internal partitions are secured at the top and bottom with compensating adjustable screw fittings, and each panel is separated from the adjoining one by a space of three inches. Over this space a thin cover piece is secured, flush with the panel face, and the cavity thus formed is used for the electric wiring system. Switches are fixed flush on the cover pieces and switch boxes are housed within the cavity. Similar cavities, as desired, are arranged in the roof.

Insulation

The building is designed to be insulated against heat losses by the insertion of a glass silk quilt in the space between the outer enameled plates and the inner wood lining. Such insulated walls, which are 4 in. thick, have a resistance to thermal transmission equal to that of a 14-in. plastered brick wall.



Cut-away view showing details of wall assembly

No attempt has been made as yet to construct a complete station, but rather only a limited prototype, comprising a waiting room, a wash room, lavatory, and boiler room, which has been erected solely for experimental and testing purposes. This structure, shown in the illustrations, is clad with maintenance-free external walls of sky-blue enamel steel panels, fitted with bronze window and door frames. The awning has a flush under-surface and is formed of stressed-skin plywood box units spanning between the main light steel frame members. Waiting passengers have a clear view of approaching trains through the wide low windows provided.

Inside, built-up plywood panels, with flush-fitting cover strips, line the walls of the waiting room, and an even temperature is maintained by radiators heated from an automatically-controlled gas-fired boiler. The wash room, with flush walls and a tiled floor, is designed for quick and easy cleaning. The wash basin stands free from the wall and is fitted with a neat plastic splash back.

A survey is being made and amendments to the design of details will form the subject of future studies. The principles have already been proved, however, and the system can be applied to buildings of large dimension. Although the design was developed strictly to provide a system for quick and flexible construction, the careful selection and application of appropriate materials and colors, combined with the general proportion of the various parts of the building, have produced a structure of pleasing appearance.

* * *

Tests of L.M.S. Turbine Locomotive

(*Continued from page 1180*)

are three well-defined summits, the first at Tring—31.7 miles, the second at Roade—60 miles, and the third at Kilsby tunnel—78.4 miles from London. From the latter point the line falls to Rugby, and trains not timed to stop there have to slow down to 40 miles per hr. At Stafford, 50 miles north of Rugby and 133.6 miles from London, there is a slowdown requiring a maximum speed of 55 miles per hr. The last 10 miles to Crewe are on falling grades of from 0.56 to 0.37 per cent following 14 miles of rising grades from Stafford varying from 0.16 to 0.26 per cent.

From Crewe northward to Carnforth the line continues to be generally favorable to both northbound and southbound trains, though going north between the 185th and 200th mile posts there is a general rise over grades varying from 0.22 to about 1.0 per cent. The line then falls to Preston, 209 miles from London, and for trains not calling there it is necessary to slow down passing through the station. Between Preston and Carnforth the line is generally easy. Carnforth is at sea level, and after passing that point the character of the line changes considerably, for during the next 31.4 miles it reaches an altitude of 915 ft. above sea level at Shap Summit. The rising grades encountered vary for the most part from 0.55 to 0.9 per cent, ending with 4 miles of 1.33 per cent to the summit. From thence to Carlisle at sea level is down hill running over grades of from 1.0 to 0.044 per cent for a distance of 31.4 miles.

In the case of southbound trains leaving Carlisle there are thus over 30 miles of fairly heavy climbing over grades much more severe than those encountered over a similar distance between London and Tring going North.

The distance over the Northern division from Carlisle to Glasgow (Central) is 102.3 miles. Generally the line rises over moderate grades for the first 40 miles to Beattock, while the succeeding 10 miles rising at rates of from 1.14 to 1.33 per cent carry the line over Beattock Summit, 1,015 ft. above sea level. From the summit to Glasgow the line falls for almost the whole of the distance at first on moderate grades for the 28.5 miles to Craigenhill Summit at an altitude of 732 ft., after passing which the descent begins in earnest, the rate of inclination varying from about 1.0 to 0.77 per cent. As in the case of the heavy road going south from Carlisle, so the difficult road between Glasgow and Beattock calls for some hard locomotive working with heavy southbound trains.

The Three Superheaters

The standard four-cylinder engines have the superheater and tube arrangements A. For the latter the temperatures of the superheated steam varies between the limits of 556 and 589 deg. F. The turbine engine with the same size superheater developed steam temperatures of between 575 and 585 deg. F. Superheater B gave steam temperatures varying from 670 to 692 deg. F. and for Superheater C the average temperatures were 682 deg. F. and the maximum shown with six valves open was 740 deg. F. In general, the steam temperatures obtained with superheater C were about the same as those shown by superheater B.

A summary of the tests is given by Table II. It will be noted that the average coal consumptions obtained with the turbine engine were 2.97, 2.885 and 2.78 lb. per db. hp. hour, with superheaters A, B, and C, respectively. Superheater B gives some 110 deg. F. higher steam temperatures than A and the fuel consumption is less by 3.8 per cent, though the water consumption per db. hp. hr. is reduced from 24.0 to 22.11 lb., representing a decrease of 7.8 per cent. The water evaporated or, perhaps better stated, taken from the tender tank per lb. of coal fired is 7.743 lb. for superheater B and for C is 8.93, the steam temperature being the same, and as the fuel required is 2.78 lb. per db. hp. hr. as against 2.885 lb., there is a further saving in the coal required per hp.-hr. of 2.6 per cent, though the steam temperatures remain substantially equal. Compared with the superheater A, superheater C shows a fuel economy of 6.4 per cent.

Both superheaters B and C produce the same steam temperatures, but with arrangement C by reason of the fact that each flue contains triple elements—that is, six pipes in place of four—the free

area through each flue is reduced from 4.04 to 3.61 sq. in. The area of the gas swept surface is considerably increased, as this will be proportional to the respective superheating surfaces, meaning that the area-to-surface ratio is increased. The greater resistance offered to the gases passing through the flues increases the efficiency of the water heating surfaces, and the resulting improved evaporation is seen in the higher water-to-coal ratio. Thus, while superheater B produced high steam temperatures the results as regards coal consumption were offset by the low water-to-coal ratio, while with superheater C high steam temperatures were attained the water-to-coal ratio was improved, presumably through a reduction of front-end temperatures resulting in an improved boiler efficiency.

The Dynamometer Tests

Three series of trials have been conducted with the turbine locomotive, each consisting of four complete journeys between London (Euston) and Glasgow (Central) when working the "Royal Scot" express and other similar trains. These tests were carried out during the months of May and October, 1936, and June, 1937. For comparative purposes two of the standard four-cylinder single-expansion Pacifics of the "Princess Royal" class, engines Nos. 6212, "Duchess of Kent," and 6210, "Lady Patricia," were also tested under similar running conditions.

Up to the date of making each of the series of tests the turbine engine had run 32,371, 63,812, and 102,915 miles and the standard engines had made 19,511 miles for No. 6212 and 1,778 miles for No. 6210 since previous repairs at the Crewe works.

For these trials all three locomotives were equipped with the same sized superheater. A further two series of tests were run, each made up of four trips for the turbine engine when fitted with superheaters B and C, respectively. The detail results are therefore omitted, as they are not really comparable on account of the different superheater arrangements.

The majority of the journeys in each direction were made by trains leaving London and Glasgow, respectively, at 10 a. m. This is the "Royal Scot" restaurant-car express train, an historic service having been inaugurated so long ago as the year 1848 and which has now been running to standardized starting times of 10 a. m. from London (Euston) and from Glasgow (Central) and Edinburgh (Princes Street) since June 1, 1862.

This train runs from London to Carlisle (Kingmoor), a distance of 301.1 miles in 326 minutes running time, representing a mean speed of 55.3 miles per hour. A stop is made at Carlisle for locomotive purposes only at the Locomotive depot at Kingmoor, two miles north of Carlisle (Citadel), the main passenger station. In all cases the "Royal Scot" is worked by one engine only between London and Glasgow in both directions. Going north from London the train calls at Symington, where the through coaches for Edinburgh are detached, similarly on the southbound run the stop at Symington is made to have the Edinburgh portion added to the main section from Glasgow. From Symington going south the train again stops at Carlisle, No. 12 signal box, for locomotive purposes, and runs from thence to London without an intermediate stop.

Between Carlisle and London the booked time allowed is 330 min., equal to an average speed of 54.7 miles per hour. Northbound from London the actual running time allowed for the 401.3 miles to Glasgow is 450 min., and the time allowed for the southbound journey is 452 min., the mean speeds for the entire journeys are, therefore, 53.5 and 53.3 miles per hour, respectively. Northbound the hardest sections of the journeys are the 31 miles of heavy climbing between Carnforth and Shap Summit, for which the time allowed is 40 min., and between Carlisle and Beattock Summit, 37 miles, for which the time allowed from the Carlisle start to passing the summit is 59 min.

Southbound the train has a difficult start with the full load from Symington, the 17 uphill miles to Beattock Summit being allowed 21 min., and on leaving Carlisle there are 33 miles of heavy working up to Shap Summit, for which the booked time from the Carlisle start to passing the summit is 48 min.

The writer acknowledges valuable assistance received from H. G. Ivatt, chief mechanical engineer of the L. M. S.

* * *

International I-4 tractor helps speed the intra-plant movement of heavy and bulky materials

Industrial Tractor

The I-4 industrial tractor developed by the International Harvester Company, 180 North Michigan Avenue, Chicago 1, Ill., is proving adaptable for many shop and storehouse material hauling purposes. Powered by a 29½ hp. gasoline engine, this tractor can attain speeds of 15½ m. p. h. forward and 3 m. p. h. in reverse. A gear drive with shafts mounted on ball bearings permits the power developed to be utilized to the full extent and conveniently located foot accelerator and countershaft brakes insure ease in operation.

The I-4 tractor has a selective, sliding spur-gear type transmission with shafts mounted lengthwise of the tractor for easy gear shifting. The heavy-duty, four-pinion-type differential is mounted on ball bearings and located on the countershafts ahead of the rear axle.

Equipment which this International tractor is capable of handling includes light maintainers, front-end shovels and loaders, road rollers, sidewalk snow plows, brushes and sweepers, trailer-trains and mowers. It can also be equipped with individually controlled rear or side power take-off.

Rhythm Touch Typewriter

The new line of typewriters announced recently by the Underwood Corporation, 1 Park Avenue, New York 16, N. Y., features "Rhythm Touch," which along with numerous functional changes indicates a trend toward increased usefulness. Included among the improvements are an accelerated type-bar action providing a rhythm touch, a new high speed shift, positive changing between small and capital letters, a new

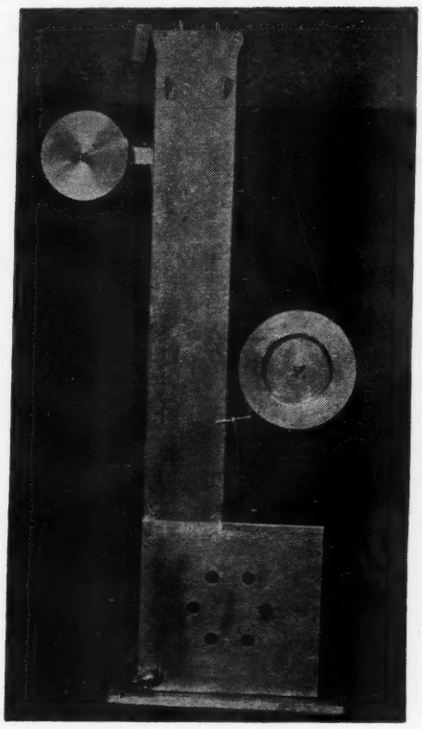
Rhythm Touch typewriter designed to provide easy and accurate operation

ribbon action for greater accuracy, particularly when using a two-color ribbon, and a wider keyboard which permits more finger ease and security.

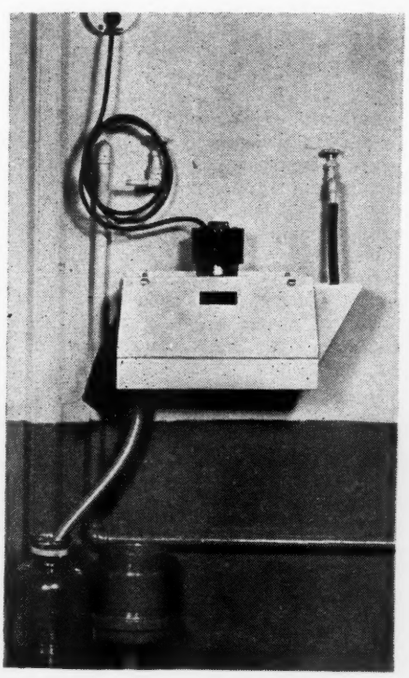
Recordak Units for Film Developing

Two film processing units which develop and dry microfilm on the spot have been developed by the Recordak Corporation, 350 Madison Avenue, New York 17, N. Y. These units are now available for railroads using microfilming at outlying junction points and it is claimed that they will develop and dry film in less than 1 hr.

Made of stainless steel, the new film developing unit is mounted on a wall at a convenient height. After a roll of film is removed from a Recordak microfilming machine, it is placed in the processing unit and rewound on a processing spindle. Time required for rewinding determines time required for processing.



Recordak film drying unit used in conjunction with the film developing unit



Microfilming processing unit permits developing film to meet the requirements of each interchange point

Processing solutions are poured into the top of the developing unit and the machine operates automatically. No heating or cooling of the solutions is required, as the developing process operates at room temperature. Processing solutions include a pre-hardener, developer and a fixer. Several rolls of film can be processed in each batch.

Companion equipment to the new processing unit is the Recordak film dryer, which is also made of stainless steel. The developed microfilm passes over racks and is dried by warm air that rises through a shaft. After the film is dried, it is wound on a reel, ready for viewing.

Lift Truck with Side-mounted Motor

A new addition to the "one-man-gang" lift trucks made by Towmotor Corporation, 1226 E. 152nd Street, Cleveland 10, Ohio, is the Model LT-35, which has a side-mounted motor and is designed to cut wheelbase length to 35 in. Placement of the motor on the side has reduced overall length without sacrifice of strength. Lifting and tilting mechanisms are hydraulic.

This model weighs only 2,800 lb. but will lift, carry and stack a 1,500 or a 2,000 lb. load in tight aisleways, elevators, highway trucks and freight cars. Its comparatively light weight also makes operation possible on 2-ton capacity elevators and in multi-story buildings with low to medium load limits.

The distinctive design of the new model places the operator at the side of the power unit and makes it easy for him to get on and off. The seat has a comfortable back rest and is protected front and rear; entrance to the driver's compartment is wide, with the step only 9½ in. high. Two wheels on the steering axle achieve a short turning radius without sacrifice of safety or stability.

Engine, transmission and axle units are easy to get at for maintenance, inspections and adjustments, while quick removal of a side plate permits electrical and carburetor adjustments. Clutch replacement can be accomplished without moving engine or transmission.

Lift truck with side-mounted motor is easily maneuvered in box cars

GENERAL NEWS

Tells Congress to Stay on the Job

Whitney wants more laws now, but not the sort that Mr. Truman urged

Calling upon Congress to "stay on the job" until it takes "positive steps to eliminate the causes of strikes," President A. F. Whitney of the Brotherhood of Railroad Trainmen has undertaken through newspaper advertisements to advance a legislative program designed to secure more privileges for union members and more "benefits" for labor, at the same time attacking President Truman for his alleged treatment of the wage dispute in which the engineers' and trainmen's brotherhoods engaged in a two-day strike.

Making five charges against the President, including one to the effect that he "used the powers of his office to force an unjust settlement" upon the brotherhoods, Mr. Whitney declared that "American workers take this record as a warning that they can no longer expect fairness from the man they elected to office, in obtaining their reasonable demands for adequate wages and decent working conditions." Moreover, he said, even though "workers don't like strikes," they feel they have no alternative, in view of Mr. Truman's record, "but to resort more and more frequently to their right to strike."

Congress should stay on the job and "prevent" strikes, according to the advertisement, even though "this is a campaign year. Representatives and senators up for reelection want to adjourn in early July. They want to go home and tell their constituents how they have fought a great battle against 'communism.' But they have not been fighting communism. Through bad action and inaction they have been perpetuating the economic injustices which breed communism and threaten our American way of life."

Included among the legislation urged by Mr. Whitney are measures to strengthen the Office of Price Administration, establish a 65 cents per hour minimum wage, abolish the poll tax, provide health insurance, and assure housing and medical care for veterans and their families.

Receiver Named for T. P. & W.

Fred Windish, an automobile dealer of Galesburg, Ill., was named receiver of the Toledo, Peoria & Western, by Judge J. Leroy Adair in a ruling on June 6 designed to bring about a resumption of operations on the 225-mi. road. It was completely strikebound from October 1, 1945, until June 3, when daily service on the eastern division extending from E. Peoria, Ill., to Effner, Ind., was resumed. (*Railway Age*, June 8.)

In appointing Mr. Windish receiver of the line, the court said that shippers "have a right under the law" to be supplied with efficient transportation. At the same time, he enjoined both the road's officers and the strikers from interfering with operation by the receiver. Judge Adair admitted that his ruling in the case was without legal precedent, but he held that railroad officers have a higher duty to the public than their private duty to stockholders, while at the same time criticizing both the unions and the management for their failure to reach an agreement.

Clarence W. Heyl, attorney for George P. McNear, Jr., president of the T. P. & W., said he would appeal, while Louis F. Knoblock, attorney for the 13 striking unions, stated that as soon as the receiver has taken over "we will immediately begin negotiations with him for resumption of service."

The ruling brings to a conclusion a suit filed by a group of shippers in which serious financial losses were claimed by them because of the shut-down of the line, and asking the appointment of receivers for the road and the striking unions. In effect, the petition for a receiver for the unions was denied. According to Mr. McNear, all shipments offered on the Eastern division of the line since June 3, have been accepted and delivered to connections.

Advisory Board Changes Schedule of Meeting

The Great Lakes Regional Advisory Board meeting, originally scheduled as a two-day session on July 1-2, will be a one day meeting to involve only the membership of the Executive and Railroad Contact committees. The groups will meet separately at 9:30 a. m. July 1 at the Statler hotel, Detroit.

"Hobby Trains" Run Again

The New York, New Haven & Hartford has announced the reinstitution of its "hobby trains," which necessarily were suspended during the war. The first scheduled in the 1946 program is due to leave Grand Central terminal, New York, June 16, for Falls Village, Conn., in the lower Berkshire hills, where arrangements have been made for the entertainment of camera, bicycle and foldboat enthusiasts. Returning, the train will leave Falls Village in the early afternoon, making its way slowly to Kent and picking up passengers at intermediate points. The road has announced its intention of running a "husking bee" train to Kent in the fall, thus reviving one of the most successful pre-war excursions of this nature.

Defense States Its Case in Georgia Suit

Kerr charges state tore words from context to put railroads in wrong

The position of the state of Georgia in its suit in the United States Supreme Court against the southern and eastern railroads is directly in conflict with the efforts and program of all the other southern states and with the views of virtually all shippers and receivers of freight in the South, William H. Swiggart, vice-president and general counsel of the Nashville, Chattanooga & St. Louis, said in New York last week, in an opening statement for the southern carriers before Lloyd K. Garrison, special master for the court.

"The program of the other southern states," Mr. Swiggart said, "is directed toward uniformity of rates as between the various sections, but uniformity can be neither achieved nor maintained with each carrier acting independently of every other, without conference about the rates to be submitted to the Interstate Commerce Commission for its approval. And yet, as the suit of the state of Georgia now stands, it is directed to the single point that such conferences among carriers and between carriers and shippers, should not be permitted, and that in dealing with rates each carrier must be required to act separately and apart from all others."

R. V. Fletcher, vice-president of the Association of American Railroads, in his opening statement on the same day, categorically denied that the A. A. R. "is in any sense a rate-making agency". The part played by the A. A. R. in the consideration of rates, Judge Fletcher declared, is limited to "the formulation of general policies and to asking railroads in cases where the interests of different groups appear to conflict", to defer action until all parties might have a chance to express their views. "In no case does the association initiate rates, or undertake to decide what rates should be initiated", he continued, "nor is there any appeal to the association from the organizations for the consideration of rates in the various sections."

On June 11, Joseph G. Kerr, chairman of the Southern Freight Association, testified that Georgia's suit rests largely upon conclusions erroneously drawn from fragmentary and incomplete evidence about transactions which, when all the facts are known, show that there is no such discrimination and conspiracy by the railroads against the South in the matter of rates as is alleged by the state. Mr. Kerr said that only portions of his files are being used by Georgia as evidence, while the complete

files which were available to the state's investigators, revealed the true situation and disproved Georgia's allegations. Instances were cited by the witness in support of his contention that the state's presentation only of excerpts from letters, memoranda and other documents instead of the full text might lead to entirely false impressions or conclusions.

According to Mr. Kerr, some of the procedures of the Southern Freight Association have been attacked as a result of a misunderstanding of the special terminology developed over the years by traffic men of both railroads and industry, which is used in the articles of the association of the organization. For example, he said, the term "action", of which Georgia has made so much, is usually nothing more than a recommendation of a committee and may also cover a change in some procedural rule, appointment of a special committee, the election of an officer, and the like.

"The Southern Freight Association, organized in 1922 largely on the recommendation of the Interstate Commerce Commission, has no power to make any rate, rule or practice," Mr. Kerr stated. "The organization is a clearing house where shippers and railroads can express their views respecting changes in rates, following which the railroads seek to the best of their ability to approve rates which will meet the standards laid down by the I. C. C., as these standards have been approved and applied by the commission."

No attempts have ever been made by one group of railroads to prevent another group of railroads from filing proposed rates or rate adjustments with the I. C. C., Mr. Kerr said on June 12, while continuing his testimony before Special Master Garrison. Inference that restrictions had been placed upon railroads from taking such action, was erroneously drawn by Georgia from a resolution adopted by the board of directors of the A. A. R. in 1935, Mr. Kerr pointed out.

"The whole purpose and intent of the resolution is clearly expressed by its language," he said. "It is to make it certain that the position of each party to a rate controversy was made known to the other parties before taking it to court, in order that the controversy might be adjusted among the parties if possible without the necessity of having the commission do it for them."

William L. McGovern, counsel for Georgia in the proceedings, said that the state is not seeking to have any rates changed or asking relief from any rates being charged her or the south. The state, he said, is complaining of presumed injury resulting from the fact that the railroads and shippers among themselves have discussed rates before submitting them to the I. C. C. for approval and that this is inconsistent with the determination of rates by free competition. Mr. McGovern stated further that Georgia is charging discrimination by the railroads only in the sense of potential or presumed discrimination allegedly inherent in the conference method of adjusting freight rates, and requested that testimony pertaining to rates be restricted. He was overruled by Mr. Garrison.

Employees' Safety Contest Won by Texas & New Orleans

The Texas & New Orleans has been awarded top honors by the National Safety Council in the 1945 Railroad Employees' National Safety Contest for Class I roads whose employees worked 50,000,000 or more man-hours. The winner's casualty rate for 1945 (employees killed plus those injured per million man-hours worked) was 3.47. This compares with an average rate of 10.68 for all the railroads in this classification of the contest.

In the 20,000,000 to 50,000,000 man-hours per year group the lowest casualty rate was reported by the Michigan Central, with 4.44. This road won the 1944 award, so it was made to the Nashville, Chattanooga & St. Louis, which had the next lowest rate in the group, 6.59. In other classes, awards went to the Gulf, Mobile & Ohio, Bessemer & Lake Erie, Charleston & Western Carolina and Pittsburg & Shawmut. The data on which the awards were based were taken from Interstate Commerce Commission reports, including only accidental deaths or injuries to employees while on duty.

Milwaukee's Safety Contest Winner a Repeater

A meeting at Milwaukee, Wis., which was addressed by several executives of the Chicago, Milwaukee, St. Paul & Pacific, marked the second consecutive victory of that road's Milwaukee division in its annual employee safety contest, giving the division permanent possession of the trophy. The division casualty rate for 1945 was 2.12, based on reportable accidents per million man-hours. Speakers on the occasion included H. A. Scandrett, president, C. H. Buford, executive vice-president, J. T. Gillick, vice-president-operation, L. J. Benson, assistant to vice-president, and J. H. Valentine, division superintendent.

Harriman Awards for 1945

The E. H. Harriman Memorial Gold Medal for the best safety record in 1945 among the larger railroads of the country has been awarded to the Chesapeake and Ohio, Wallace J. Falvey, president of the American Museum of Safety, has announced. A silver medal has been awarded to the Duluth, Missabe and Iron Range and a bronze medal to the Pittsburg, Shawmut & Northern for leadership in safety among the railroads in their respective classes.

A certificate of special commendation has been awarded to the Union Pacific for its "continuous high record of safety."

The Harriman Memorial Medals, which were founded in 1913 by the late Mrs. Mary W. Harriman, in memory of her husband, Edward H. Harriman, have been awarded heretofore 26 times by the American Museum of Safety.

The medals will be presented by Robert V. Fletcher, vice-president, Association of American Railroads, and chairman of the award committee, American Museum of Safety, at a dinner to be held at the Hotel Ambassador on June 19. President Falvey will preside. The principal speaker will be George M. Barnard, chairman of the Interstate Commerce Commission. Many railroad presidents and industrial leaders will be present.

The gold medal will be accepted by Robert J. Bowman, president of the Chesapeake and Ohio; the silver medal by P. H. Van Hoven, president of the D. M. & I. R.; the bronze medal by Thomas C. Buchanan, receiver of the P. S. & N.; and the certificate of special commendation by G. F. Ashby, president of the Union Pacific. The awards are determined on the basis of the official records of the Interstate Comemrce Commission for the year 1945, the railroads being ranked in their several groups according to their individual safety ratings.

Baker Succeeds Cunningham at Harvard Business School

George P. Baker has been appointed James J. Hill Professor of Transportation at the Graduate School of Business Administration, Harvard University, succeeding William J. Cunningham who has become professor emeritus after holding the professorship since its establishment in 1916. Mr. Baker, who has been in government and military service for several years, was formerly assistant professor of transportation at Harvard.

His government service has included membership on the Civil Aeronautics Board of which he was vice-chairman during part of 1942. Most recently he has been director of the Office of Transport and Communications Policy, Department of State. The State Department's announcement of his resignation said that his new assignment will include supervision of studies being carried out in connection with the Harvard Committee on Aviation Research.

Railway Tie Association Sets New Date for Meeting

The first post-war convention of the Railway Tie Association will be held on July 15-16 at the Netherland Plaza hotel, Cincinnati, Ohio. This two-day meeting was originally scheduled for May 28-29, but was postponed due to the railroad strike.

A timely and well-planned program dealing with many phases of the production, handling and service life of crossties includes as one of its prominent features an address by R. H. White, Jr., and a motion picture depicting the mechanical apparatus for handling crossties developed by the Southern Wood Preserving Co. at its Atlanta, Ga., plant.

Merger Committees Formed by Katy, C. G. W., C. & E. I.

Active study of a proposal to merge the Missouri-Kansas-Texas, Chicago & Eastern Illinois and Chicago Great Western began in Chicago on June 5, with the first meeting of a merger committee composed of various directors and officers of the three roads.

At the meeting R. J. Morfa, chairman of the board of the Katy, and N. A. Phillips, secretary of that company, were elected chairman and secretary, respectively, of the merger committee. Other committee members are Donald V. Fraser, president of the Katy; Holly Stover, president, and R. D. Mathias and D. W. Hornbeck, direc-

tors, all of the C. & E. I.; and Patrick H. Joyce, chairman, B. F. Parsons, vice president and secretary, and R. M. Shaw, general counsel, representing the Great Western.

Operating and traffic committees were appointed by the group, to study operating economies and traffic possibilities of a merger. Members of the operating committee are Mr. Fraser, F. G. Nicholson, general manager of the C. & E. I., and H. W. Burtness, president of the C. G. W. The traffic committee consists of Mr. Parsons; J. F. Hennessey, Jr., vice-president, traffic, of the Katy; and H. R. Sampson, vice-president, traffic, C. & E. I.

Award to Dr. L. K. Sillcox

Dr. Lewis K. Sillcox, first vice-president, New York Air Brake Company, was presented the gold medal of the Institute of Locomotive Engineers of Great Britain at a testimonial dinner to Dr. Sillcox and W. S. Graff-Baker, chief mechanical engineer of the London Passenger Transport Board and the retiring president of the Institute, held at the Union League Club, New York, on June 5.

The dinner, at which W. M. Sheehan, vice-president, General Steel Castings Corp., presided, was attended by 50 officers and engineers of railways, and railway equipment and supply companies, former officers of the American Society of Mechanical Engineers, and members of its Railroad division. Mr. Graff-Baker was introduced by D. Robert Yarnall, president of the society. The medal was awarded to Dr. Sillcox for his paper entitled "Power to Pull," which was presented before the 1942-43 session of the Institute. Mr. Graff-Baker described this paper as a model in its approach to the problem of appraising the relative value of steam and Diesel-electric motive power.

Another C. & O. Ad Calls for Service Through St. Louis

The Chesapeake & Ohio has asked readers of its newspaper advertisements to write to those papers in support of its campaign to have through passenger cars or trains operated via St. Louis between eastern and western cities, and particularly between eastern points and Texas. While the C. & O. "is not the most logical road to initiate through service at St. Louis," according to the latest advertisement—entitled "Let's Get That Mule off the Tracks"—it suggests that such a service would be perfectly practicable, without altering present train schedules, by a combination route made up of the C. & O. from Washington to Cincinnati, the Big Four thence to St. Louis, and either the Missouri Pacific or the Frisco-M-K-T from St. Louis to Texas cities.

Readers of the advertisements are informed that through service via St. Louis could be arranged even more easily than through Chicago because all roads use the St. Louis Union station and all roads back their trains into that station. All that would be necessary, the advertisement indicates, would be to detach the eastern road's locomotive and head-end cars and attach the comparable equipment of the western road, while the passenger, his baggage and his accommodations remain undisturbed on the same station track.

Freight Car Loadings

Loadings of revenue freight for the week ended June 8 totaled 830,126 cars, the Association of American Railroads announced on June 13. This was an increase of 203,241 cars, or 32.4 per cent, above the previous holiday week, a decrease of 54,532 cars, or 6.2 per cent, under the corresponding week last year, and a decrease of 43,048 cars, or 4.9 per cent, below the comparable 1944 week.

Loading of revenue freight for the week ended June 1 totaled 626,885 cars, and the summary for that week as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For the Week Ended Saturday, June 1

District	1946	1945	1944
Eastern	123,601	151,699	146,434
Allegheny	109,681	183,623	186,574
Pocahontas	24,107	53,677	54,951
Southern	110,370	126,265	119,336
Northwestern	95,222	122,519	121,284
Central Western	107,488	125,359	112,576
Southwestern	56,416	74,744	69,543
Total Western Districts	269,126	322,622	303,403
Total All Roads	626,885	837,886	810,698
Commodities:			
Grain and grain products	39,303	48,513	37,107
Livestock	13,432	12,850	12,655
Coal	61,791	160,923	168,655
Coke	4,748	14,762	14,671
Forest products	41,810	43,617	39,371
Ore	37,400	72,309	79,563
Merchandise l.c.l.	107,750	100,856	97,203
Miscellaneous	320,651	384,056	361,473
June 1	626,885	837,886	810,698
May 25	571,574	882,753	868,821
May 18	688,240	868,914	870,075
May 11	684,942	838,764	867,182
May 4	671,311	866,034	835,538
Cumulative total, 22 weeks	15,580,063	17,749,916	17,757,013

In Canada.—Car loadings for the week ended June 1 amounted to 66,101 cars as compared with 60,948 cars for the previous week and 74,510 cars for the corresponding week last year, according to the compilation by the Dominion Bureau of Statistics.

Totals for Canada	Revenue Cars Loaded	Total Cars Rec'd from Connections
June 1, 1946	66,101	31,658
June 2, 1945	74,510	37,322
Cumulative Totals for Canada		
June 1, 1946	1,452,061	745,165
June 2, 1945	1,474,448	814,598

H. & M. Strike Continues

No evidence was available, when this issue went to press, of progress toward settlement of the strike of members of the Brotherhood of Railroad Trainmen and Brotherhood of Locomotive Engineers which has tied up operation of the Hudson & Manhattan since May 30. Union leaders were describing the situation as a stalemate, and strikers were reported to be receiving benefit payments from the unions.

The "emergency board" appointed by President Truman to consider the dispute between the road and its employees met in New York June 6. Following their announced program, the brotherhood representatives failed to appear before the board, but it heard the railroad's case and concluded its sessions June 11. Its recommendations were expected to go to the White House within a few days.

Meanwhile New York commuters who normally patronize the H. & M. continued to use other means of transportation to and from New Jersey points. Strikers' pickets were on hand at the principal H. & M. stations, but no disorder was reported, and there was no indication of any effort to interfere with the operation of trains or ferries of other railroads. However, handbills in the name of the Harlem Labor Union were distributed on New York streets in the vicinity of the H. & M. terminal, informing the public that there were available "hundreds of returned negro veterans and other citizens who are qualified to operate these trains," having had experience on the New York city subways. The "constitution of the railroad brotherhoods," according to the handbills, "says 'you must be white' in order to work," and the result, it was pointed out, is that not a single negro is permitted to work on the H. & M. "Labor must clean house now!" the sheets went on, and "negroes must get their share of jobs, now."

Civil Service Exams

The Civil Service Commission again announces examinations for probational appointment in the federal service. Competition for such appointments is now open to qualified engineers.

Positions to be filled from the engineer examination are located in Washington, D. C., and the immediate vicinity. Salary offered is $2,644.80 per annum for a 40-hour workweek, with compensation provided for any authorized overtime in excess of the 40-hour week. Applications will be accepted by the commission in Washington during the period from June 17 to July 10.

Tipping Dining Car Employees Banned by Pere Marquette

A ban against tipping for service aboard dining cars of the Pere Marquette went into effect June 10, according to an announcement by R. J. Bowman, president. The management, Mr. Bowman said, has received assurances of cooperation from the employees, who have promised to comply with the new rule and have pledged courteous and satisfactory service. An arrangement "which is satisfactory to the service and kitchen personnel compensates these employees, in part at least, for the loss of tips," he said.

In notices printed on menus, wine lists, and table cards, patrons will be asked to cooperate through strict observance of the ban on gratuities to the waitresses, hosts, and assistant hosts, who constitute the service personnel on Pere Marquette dining cars.

"We have set up," Mr. Bowman said, "what we regard as a satisfactory groundwork on which to venture an experiment aimed at a 'tyranny of custom', already too deeply rooted in the field of railroad transportation. A start has to be made, sometime and somewhere, to abate the increasing inroads on the pocketbook of the average traveler, who is oftentimes deterred from riding on trains because of 'extras' in the

form of tips for various services that should be performed as a matter of course. The incidentals of railroad travel, including the services of porters and waiters, should be implicit in the ticket the passenger buys. Railroads might well take a leaf from the notebook of the air lines in this respect, as has been advocated repeatedly by Robert R. Young, chairman of the board of the Chesapeake & Ohio.

"The Pere Marquette is sufficiently impressed with this suggestion," Mr. Bowman continued, "to be willing to be the 'guinea pig' in a 'laboratory experiment' involving dining car tipping. We do this in the hope that it may lead to a trend that will result in much larger relief for the harassed traveler. It will, if the traveler himself is sufficiently adamant in resisting the tipping habit."

The Paper "Labor" Is Discussed by the "Railroad Trainman"

Under the heading "Is 'Labor' a Newspaper?" the Railroad Trainman, monthly journal of the Brotherhood of Railroad Trainmen, has set forth in detail the results of a review of issues of that weekly from December, 1944, to May of this year, which have led it to the conclusion that "if railroad workers want unprejudiced, reliable and full information on the affairs of their organizations, they cannot depend upon Labor to furnish it. . . . It is not a newspaper, but rather a biased political organ of certain interests in the railway labor movement."

In November, 1945, according to the Railroad Trainman, representatives of the firemen's, conductors' and switchmen's brotherhoods "shamefully asked the engineers and trainmen to withdraw from the joint conferences with the carriers [instituted earlier that month], so these three organizations could agree with the carriers to scuttle the rules program. This was done, and the three organizations did not have the courtesy to advise the engineers and trainmen of their scuttling of the rules program, but that information was conveyed to the engineers and trainmen by the carrier representatives. There is something very wrong when labor unions leave it to the bosses to announce their program."

In its issue of December 8, 1945, says the Railroad Trainman, Labor told its readers that the unions and carriers had agreed to concentrate on wage raises, but "no mention was made of the trainmen and engineers and their continued loyalty to the wage-rules program which the five organizations had agreed to handle jointly." Continuing, the Trainman declares that "it is extremely significant that months before the three transportation organizations ran out on the joint rules program, Labor, which reflects their views, was either not mentioning the rules proposals at all or was playing them down, thereby proving that even during the time when the chief executives of the three transportation organizations were ostensibly cooperating with the trainmen and engineers on the rules program, they were preparing to run out on this program."

Charging that Labor had failed to publish news of interest to its readers, as in the case of its "shameless contempt" for the result of the strike ballot spread by the engineers and trainmen, for which "even the anti-labor newspapers of our country showed more respect," and that Labor was guilty of "editorializing in news columns," the article in the Railroad Trainman winds up with a charge that "those ersatz leaders of railroad labor who ran out on the engineers and trainmen after agreeing to a joint wage-rules program have met their Waterloo, and have been successful only in the columns of the false propaganda sheet called Labor."

* * *

Canadian labor assumes "Our full share of responsibility"

"We are anxious to be partners in this industry and to assume our full share of responsibility," said Joseph Corbett, of London, Ont., speaking for the 20,000 motive power and car equipment department employees of the Canadian National Railways at the twentieth annual meeting of the system committee, C. N. R. Union-Management Cooperative Movement, Motive Power and Car Equipment Section, recently held in Montreal. Canada's first organization of its kind, it has served as a pattern for similar movements elsewhere in Canada and in other countries. The photograph shows left to right, seated, B. L. Daly, director, C. N. R.; E. Ackerman, general secretary, cooperative movements; E. R. Battley, chief of motive power and car equipment and chairman of the committee; N. B. Walton, C. B. E., executive vice-president, of the Canadian National Railways, Montreal; and J. Corbett, president, C. N. R. federation No. 11, London, Ont. Standing are A. E. Payne, general chairman, sheetmetal workers association, Montreal; A. B. Stuart, secretary-treasurer, Federation No. 11, Winnipeg; H. Smith, president, division No. 4, American Federation of Labor, Montreal; A. A. Bourque, general chairman of electricians, Moncton; J. Duffin, president, Federation No. 92, Battle Creek, Mich.; W. H. C. Logan, vice-president, Federation No. 11, Winnipeg; and G. E. McCoy, assistant chief of car equipment, E. A. Bromley, general purchasing agent, D. McK. Ford, vice-president of purchases and stores, and S. W. Fairweather, vice-president of research and development, of the C. N. R., Montreal.

Southern Puts on More Diesels

Six new two-unit, 4,000-hp. Diesel-electric passenger locomotives, ordered by the Southern more than a year ago, have now been received and will be used to provide additional Diesel-powered passenger service on that road's Washington-Atlanta and Cincinnati-Jacksonville main lines, according to Ernest E. Norris, president.

Under present plans, the new locomotives will enable the Southern to use Diesel power on the "Piedmont Limited," between Washington and Atlanta; the "Tennessean," between Washington and Monroe, Va.; and the "Ponce de Leon," between Cincinnati and Jacksonville. Other motive power on order and still to be delivered, Mr. Norris added, includes 24 Diesel 6,000-hp. freight locomotives and 14 Diesel 1,000-hp. switchers.

Gain in Average Load per Car Must Be Held

Chairman Warren C. Kendall of the Car Service Division, Association of American Railroads, finds it "clearly evident" from the Interstate Commerce Commission's 1945 statistics of average tonnage per car that any substantial loss in that connection "may seriously affect the ability of the railroads to provide an adequate car supply." Mr. Kendall's warning came in a recent circular wherein he summarized the I. C. C. figures and urged all railroads to analyze their own statistics and actively follow the matter "to the end that recent gains may be maintained for the future."

Mr. Kendall's summary shows that the average load per car of all carload traffic in 1945 was 39.89 tons, a decrease of 0.38 tons under the 1944 figure. He emphasized that "even this fraction of a ton as applied to the total loading means, in effect, that the 1945 traffic required 329,848 more carloads than would have been needed if the average tonnage per car of 1944 had prevailed."

"Based on the 1945 turn-around time," Mr. Kendall went on, "this means that 13,430 freight cars were required during the entire year to handle the volume of tonnage which is represented by the loss in average tonnage per car, comparing the two years.

"To a large extent the heavier loading of cars which has existed during the war years has been due to the requirements of ODT General Order 18-A. While this order is still in effect its benefits will likely be lost with the dissolution of the Office of Defense Transportation, unless similar orders are made effective by some other agency. Many shippers and receivers who complied with this order during the stress of the war emergency are now urging that it be canceled. From the standpoint of car sup-

ply, which as to certain types is, and will continue to be, tight, it is clearly evident from these statistics that any substantial loss in the tonnage per car, thus requiring more units of equipment to handle a given tonnage, may seriously affect the ability of the railroads to provide an adequate car supply."

Meanwhile, the C. S. D. chairman has called attention to the "outstanding feature" of the statistics—the increase of 2½ tons per car in the loading of products of agriculture comparing 1945 with 1944. He also pointed out that since 1929 there has been an increase of 10.8 tons in the average load per car of products of agriculture. "On the adverse side of the ledger," he added, "is a loss of one-half ton per car in the commodities grouped in the Manufactures and Miscellaneous classifications, comparing 1945 with 1944, and in this group the gain since 1929 amounts to only 4.2 tons per car."

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

ALLIED RAILWAY SUPPLY ASSOCIATION. — J. F. Gettrust, P. O. Box 5522, Chicago 80, Ill. Exhibit in connection with meetings of Coordinated Mechanical Associations, September 4-6, 1946, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS. — E. P. Soebbing, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, June 25-27, 1946, Hollenden Hotel, Cleveland, O.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C. R. R. of N. J., 143 Liberty St., New York 6, N. Y. Annual meeting, September, 1946, Boston, Mass.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, 1103 Cleveland St., Evanston, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 17-19, 1946, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION. —W. J. Walsh, B. & O. R. R., Baltimore 1, Md.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.— Works in cooperation with the Association of American Railroads, Engineering Division.— W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—Virginia Tanner, Baltimore & Ohio Magazine, Room 1202, B. & O. Bldg., Baltimore 1, Md.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.— J. P. Nye, Tower Bldg., Washington 5, D. C. Annual meeting, October 2-3, 1946, Morrison Hotel, Chicago, Ill.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS. —C. E. Davies, 29 W. 39th St., New York 18, N. Y. Semi-annual meeting June 17-20, 1946, Detroit, Mich.

Railroad Division.—E. L. Woodward, Railway Mechanical Engineer, 105 W. Adams St., Chicago 3, Ill.

AMERICAN TRANSIT ASSOCIATION.—A. W. Baker, 292 Madison Ave., New York 17, N. Y.

AMERICAN WOOD-PRESERVERS' ASSOCIATION. — H. L. Dawson, 1427 Eye St., N. W., Washington 5, D. C. Annual meeting, 1947, Portland, Ore.

ASSOCIATED TRAFFIC CLUBS OF AMERICA, INC.— R. A. Ellison, Cincinnati Chamber of Commerce, 1203 C. of C. Bldg., Cincinnati 2, O.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—H. S. Whited, 5th & T Sts., N. E., Washington 2, D. C. Annual meeting October 8-10, 1946, Boston, Mass.

ASSOCIATION OF AMERICAN RAILROADS. — H. J. Forster, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.— Clark Hungerford, Vice-President, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division. — L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.

Operating Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.

Communications Section.—W. A. Fairbanks, 30 Vesey St., New York 7, N. Y. Annual meeting, September 10-13, 1946, Hotel Statler, Detroit, Mich.

Fire Protection and Insurance Section. —W. F. Steffens, New York Central, Room 3317, 230 Park Avenue, New York 17, N. Y.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill.

Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, October 28, 1946, Hotel Sherman, Chicago, Ill.

Protective Section.—J. C. Caviston, 30 Vesey St., New York 7, N. Y. Annual meeting, June 25-27, 1946, George Vanderbilt Hotel, Asheville, N. C.

Safety Section. — J. C. Caviston, 30 Vesey St., New York 7, N. Y.

Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Construction and Maintenance Section. —W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago 5, Ill.

Signal Section.—R. H. C. Balliet, 30 Vesey St., New York 7, N. Y. Annual meeting, October 14-16, 1946, New Ocean House, Swampscott, Mass.

Mechanical Division.—Arthur C. Browning, 59 E. Van Buren St., Chicago 5, Ill.

Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, October 23-25, 1946, Hotel Sherman, Chicago, Ill.

Purchases and Stores Division.—W. J. Farrell (Executive Vice-Chairman), Transportation Bldg., Washington 6, D. C.

Freight Claim Division.—Lewis Pilcher, 59 E. Van Buren St., Chicago 5, Ill.

Motor Transport Division.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Car Service Division.—E. W. Coughlin, (Assistant to Chairman), Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department—E. H. Bunnell, Vice-President, Transportation Bldg., Washington 6, D. C.

Accounting Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C. Annual meeting, June 18-21, 1946, Mount Washington Hotel, Bretton Woods, N. H.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington 6, D. C.

Traffic Department.—A. F. Cleveland, Vice-President, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Alton R. R., 340 W. Harrison St., Chicago 7, Ill.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—E. C. Gunther, Duff-Norton Mfg. Co., 122 S. Michigan Ave., Chicago 3, Ill. Exhibit in conjunction with American Railway Bridge & Building Association Convention, September 17-19, 1946, Hotel Stevens, Chicago, Ill.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal 28, Que. Regular meetings second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.— J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis 3, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel De Soto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill. Annual meeting, September 4-6, 1946, Hotel Sherman, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—Ralph J. Feddor, 2803 N. Campbell Ave., Chicago 18, Ill. Regular meetings, second Monday of each month, except June, July and August, La Salle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, 1840-42 Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS. —H. J. Hawthorne, Union Railroad, East Pittsburgh, Pa.

EASTERN CAR FOREMAN'S ASSOCIATION. — W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February (Annual Dinner), March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker Street, North Little Rock, Ark. Annual meeting September 4-6, 1946, Hotel Sherman, Chicago, Ill.

MASTER BOILER MAKERS' ASSOCIATION. — A. F. Stiglmeier, 29 Parkwood St., Albany 3, N. Y. Annual meeting September 4-6, 1946, Hotel Sherman, Chicago, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Ben Smart, 7413 New Post Office Bldg., Washington 25, D. C. Annual meeting, November 12-15, 1946, Los Angeles, Cal.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—W. B. Shepherd, Aluminum Company of America, Gulf Bldg., Pittsburgh 19, Pa. Annual meeting, October, 1946.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.—Edward F. Lacey, Suite 450, Munsey Bldg., Washington 4, D. C.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.— C. H. White, Room 1826, 208 S. La Salle St., Chicago 4, Ill.

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston 11, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB. — D. W. Pye, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y. Annual outing, June 11, 1946, Travers' Island, N. Y.

NORTHWEST CARMEN'S ASSOCIATION. — E. N. Myers, Minnesota Transfer Ry., 1434 Iowa Ave., St. Paul 4, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB. — William S. Wollner, P. O. Box 458, San Rafael, Cal. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, Cal., and Hotel Biltmore, Los Angeles, Calif.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago 3, Illinois. Annual dinner, November 21, 1946, Waldorf-Astoria Hotel, New York, N. Y.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen-Bradley Company, 624 W. Adams St., Chicago 6, Ill. Exhibit in conjunction with meeting of the Electrical Section of the Mechanical Division of the A. A. R., October 23-25, 1946, Chicago, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, Room 811, Utilities Bldg., 327 S. La Salle St., Chicago 4, Ill. Annual meeting, September 4-6, 1946, Hotel Sherman, Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION. —J. D. Conway, 308 Keenan Bldg., Pittsburgh, Pa.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section, of A. A. R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 610 Shell Bldg., St. Louis 3, Mo.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise LaChance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 17-19, 1946, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A. A. R. Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.— A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS. —D. W. Brantley, C. of Ga., Savannah, Ga.

TORONTO RAILWAY CLUB.—D. M. George, P. O. Box 8, Terminal "A," Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, O. and C. Company, 59 E. Van Buren St., Chicago 5, Ill. Exhibit in connection with Roadmasters' and Maintenance of Way Association Convention, September 17-19, 1946, Hotel Stevens, Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.— Roy E. Collins, 225 Bidwell Ave., Westerleigh, Staten Island 2, N. Y. Annual meeting, October 12-13, 1946, Baltimore, Md.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago, Ill. Regular meetings, third Monday of each month, except January, June, July, August and September, Hotel Sherman, Chicago, Ill.

A list of current publications appears on page 1207.

With the Government Agencies

War Prosperity Can't Alter Revamp Plans

Court bars relief for junior creditors where I. C. C. was aware of trends

Provided it was "fair and equitable" to all parties as of its effective date, an approved plan of reorganization for a bankrupt railroad need not thereafter be altered by the Interstate Commerce Commission to give dissenting junior creditors more favorable treatment out of subsequently-realized, but not unforeseen wartime earnings and "free cash in excess of operating capital needs." The United States Supreme Court so ruled this week in reversing the Tenth Circuit Court of Appeals which had remanded the Denver & Rio Grande Western reorganization plan to the commission for reconsideration of the treatment accorded holders of the debtor's general mortgage bonds.

The opinion, announced by Justice Reed, disposed of five cases in which the circuit court's ruling was appealed by the Reconstruction Finance Corporation and various bank trustees, all owners of claims against the D. & R. G. W. and the secondary debtor, the Denver & Salt Lake Western. Respondents were the two debtors; City Bank Farmers Trust Company, trustee under the general mortgage; and the trustee of the Missouri Pacific, a large holder of the old D. & R. G. W. common stock which will be wiped out under the reorganization plan. It was a 6 to 1 decision, the dissenter being Justice Frankfurter, who "will set forth the detailed grounds for his dissent in an opinion to be filed hereafter."

B. & O. Case Not Taken On—At the same time the court issued four orders denying petitions for review in six cases involving other attacks against the D. & R. G. W. plan and against the plan of reorganization for the St. Louis-San Francisco. Also, it refused to consider an appeal in another case involving the Baltimore & Ohio's debt adjustment plan.

The D. & R. G. W. cases which became the subject matter of the court's opinion arose out of the rejection by the general mortgage bondholders of the reorganization plan which allocated to them common stock in the face amount of 10 per cent of their claims. The effective date of the plan was January 1, 1943, and all other classes of voting creditors accepted it, a certificate of the result of the voting having been filed July 15, 1944, in the United States District Court for the District of Colorado. On November 1, 1944, the district court held that rejection of the plan by holders of the general mortgage bonds was not reasonably justified and thereafter confirmed the plan on November 29, 1944.

Court Refuses to Dissolve Class-Rate Injunction

The Supreme Court this week denied the motion whereby the Interstate Commerce Commission had sought to have dissolved a lower-court injunction staying the operation of the interim class-rate adjustment ordered by the commission in the No. 28300 proceeding. As noted in the *Railway Age* of June 8, page 1151, the motion was filed by Attorney General Clark and commission counsel; and the supporting argument asserted that the general class-rate adjustment should be allowed to go into effect to pave the way for commission action on that phase of the railroads' Ex Parte 162 petition which sought to make the proposed 25 per cent increase in freight rates effective May 15.

The lower court upheld the commission's No. 28300 order, but continued the injunction pending appeal of its decision by the northern states and western railroads. Thus the commission went to the Supreme Court only to have the injunction dissolved. Among other arguments, it asserted that if the injunction remained it could not grant a flat percentage increase in the pending Ex Parte 162 case "without aggravating the discriminations found to exist with respect to class rates."

As noted above, the circuit court reversed the district court and remanded the case to the commission, the remand, as the Supreme Court put it, being such that the commission "was empowered to proceed anew to consideration of the reorganization in all its phases." Meanwhile, however, the circuit court had upheld various determinations of the commission with respect to the plan, its reversal coming from its holding that free cash in excess of operating capital needs and large earnings from war business after the date of the plan should be for the benefit of the general bondholders.

Before coming to its disposition of specific contentions of the general mortgage bondholders in support of this holding, the Supreme Court called attention to the fact that it had recently considered in the Western Pacific and Milwaukee cases "the basic problems of railroad reorganizations under section 77 of the Bankruptcy Act." As noted in the *Railway Age* of March 20, 1943, those decisions upheld in practically all respects the acts and decisions of the commission in putting into effect railroad reorganization plans.

No New Legislation—The present

(*Continued on page 1197*)

Wage Increase's Cost Put at $725,000,000

Average straight-time hourly pay will be $1.10, I. C. C. bureau calculates

The 18.5 cents per hour wage increase will cost the Class I line-haul railroads an estimated $725,000,000 in 1946, it was forecast this week by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission in its latest "Monthly Comment on Transportation Statistics." The total includes $685,000,000 as the estimated cost of the wage boost, and additional payroll taxes of $40,000,000.

In an analysis of the average straight-time hourly earnings of Class I road employees, excluding executives, general officers and assistants, the bureau points out that the 1946 hourly income, based on the 1945 straight-time hourly earnings of 91.6 cents per hour plus 18.5 cents per hour, will be $1.101 per hour, an increase of 52.7 per cent over the 72.1 cents average straight time hourly earnings for 1939.

Would Have Cost More in '45—According to the bureau, preliminary figures for the first three months of 1946 indicate that the total of "hours paid for" by Class I roads was about 5 per cent below that for the same period of 1945. Its forecast of the wage increase's cost is thus based on the assumption that the total "hours paid for" in 1946 will be 95 per cent of the 1945 total. Had the wage increase been in effect in 1945, it would have cost $805,000,000, including payroll taxes, according to the bureau's figures.

Another phase of the report reveals that the railway freight revenue from the transportation of explosives increased from $3,559,417 in 1939 to $432,314,992 in 1944, but dropped to $409,614,706 in 1945. Preliminary figures for the first two months of 1946 indicate that the revenue from this traffic has declined approximately 75 per cent in comparison with the same period of 1945.

"In 1944 and 1945, the revenue from the transportation of 'Explosives, N. O. S.,' which covers such items as ammunition, gun powder, bombs, nitroglycerine, torpedoes, etc., was one of the principal sources of the carriers' freight revenue during the war years," the bureau added. "In 1944 and 1945, the revenue from this traffic accounted for about 6 per cent of the total freight revenue and was exceeded only by that from bituminous coal and manufactures and miscellaneous, N. O. S. The latter class, which covers at least 1,200 articles of commerce, included a large volume of war material in these years. The revenue per car originated on 'Explosives, N. O. S.,' during the war period exceeded that of any

other commodity class, reaching a peak of $1,289 per car in 1945."

Capital Expenditures—In a section on capital expenditures for 1946, the "Comment" set forth results of returns to a recent bureau circular requesting information on the matter from Class I line-haul roads. The returns indicated that total expenditures during this year's first three quarters will total $411,442,038, or more than $133,000,000 a quarter. The total includes $174,802,711 for road and $236,639,327 for equipment.

These figures are based on returns from 128 roads which reported actual first-quarter expenditures of $98,265,479; 126 roads which reported estimated second-quarter expenditures of $131,703,668; and 124 roads which reported estimated third-quarter expenditures of $181,472,891. The 123 roads which made complete reports for all three quarters put their actual and estimated expenditures at $382,907,259, as compared with $320,112,145 in the first three quarters of 1945.

With respect to the division of expenditures between road and equipment, the bureau called attention to the fact that the total for the three months as well as the estimates for he second and third quarters indicated outlays for equipment greatly in excess of those for roadway property.

"No such considerable difference . . . . occurs in the expenditures actually reported for the first quarter," it went on, adding that "it is possible, though only a conjecture, that the large excess of the estimated equipment expenditures in the second and third quarters, as compared with the actual of the first quarter, reflects anticipated deliveries of equipment on order.

"What effect on the actual expenditures in the second and third quarters as compared with the estimates may be anticipated as a result of the wage increases and other increases in cost is, of course, a matter of conjecture," the bureau commented. At the same time, it pointed out that the first wage awards of 16 cents per hour were made before the circular went out, although the returns were all in before the agreement to make the increase 18.5 cents per hour was reached.

Referring to railway taxes, the bureau found that the total federal income taxes of Class I roads for the first four months of 1946 amounted to $17,591,846, a decrease of 95.3 per cent below the corresponding 1945 period. Although the excess profits tax was eliminated as of January 1, 1946, the 1946 figures include tax credits applicable to prior years.

"Class I line-haul steam railways reported total tax accruals for the year 1945 as $825,000,000, a decrease of 55.3 per cent," the bureau continued. "This change was the result of a decrease of $999,000,000 in federal income and excess profits taxes and a drop of $22,000,000 in all other taxes, including federal payroll taxes for old age requirement and unemployment insurance, miscellaneous federal taxes and state and municipal taxes. Because of large tax credits resulting from abnormal charges by operating expenses in 1945 for accelerated amortization of defense projects, claims for refunds on account of 'carry-back' provision of tax laws, adjustments of accruals for prior years and lower taxable income, the combined federal income taxes in 1945 were 76.6 per cent below those of 1944. The normal tax and surtax accruals in 1945 were 25.2 and 20.4 per cent, respectively, lower than in 1944 while excess profits declined about $931,000,000, or 91.5 per cent. For the year 1945, 46 roads reported net debits for excess profits taxes and 35 roads reported net credits for such taxes."

Freight Revenue a Third Less—The bureau's usual analysis of the latest month revenue returns showed that April freight revenues of Class I roads, on a daily basis, were 14.9 per cent less than for March and 32.9 per cent under the freight revenue for April, 1945, while passenger revenue was 4.3 per cent less for April, on a daily basis, than for March and 17.9 per cent under the passenger revenue of April, 1945. The April freight revenue index (based on the 1935-39 monthly average as 100) was 158.5, as compared with March's 186.2 and April, 1945's 236.4. The passenger revenue index was 313 as compared with March's 327.1 and April, 1945's 432.5.

"Revenue freight traffic in March, 1946, declined 12.9 per cent in the number of tons carried and 18.6 per cent in the number of ton-miles as compared with March, 1945," the bureau pointed out. "The number of passengers carried declined 6.5 per cent, while the number of passenger-miles, reflecting a decrease in the average journey per passenger per road, decreased 15.5 per cent. Revenue carloadings for the first 22 weeks of 1946 decreased 12.2 per cent from loadings in the same 1945 period ,while livestock and merchandise l.c.l. loadings showed increases from last year of 10.6 per cent and 14.1 per cent, respectively. All other commodity groups experienced decreases, ranging from 3.2 per cent for grain and grain products to 60.9 per cent for ore."

The report also refers to a forecast by the Production and Marketing Administration of the Department of Agriculture, which expects weekly loadings of grain to average 51,100 cars in June, 60,200 cars in July and 55,300 cars in August. P. M. A. also expects June loadings of livestock to average 13,200 cars weekly, 3.8 per cent below last year's total, but to increase 9.1 per cent and 6.8 per cent in July and August over the corresponding 1945 months. Increases in the loadings of agricultural produce and canned foodstuffs also are predicted, although an estimated 20 per cent decrease in loadings of beverages also is seen.

"Coal dumpings at lower Great Lake ports totaled 4,400,000 tons on June 3, as compared with 12,000,000 on the same date of 1945," the bureau said. "The prospects of making up any considerable portion of this slippage by the use of water transportation during the current navigation season are poor and much of the 7,600,000-ton difference will be carried long distance by rail, with a resultant increase in turnaround time for coal cars. Stockpiles of decrease in loadings of beverages also is iron ore are currently some 40 per cent greater than last year and the movement of ore down the Great Lakes this season may be somewhat under the 62,000,000 tons expected at the end of April."

Net ton-miles per freight car-day increased consistently in each of the six first-quarter periods from 1938 (average 433) through 1944 (average 1,055), but declined in 1945 and then dropped sharply in 1946, the bureau disclosed, but it added that the average 897 for the first three months of 1946 is much higher than that for the same period in any of the 14 years from 1929 to 1942.

Remaining sections of the "Comment" set forth and discussed the 1945 operating revenues of the water carriers and truckers, as gleaned from summaries of the four quarterly reports received by the commission from those carriers.

As compared with 1945, the reporting water carriers experienced tonnage and freight declines of 8.3 per cent and 9.5 per cent, respectively. Their passenger revenues also declined.

Operating revenues of 1,342 Class I motor carriers of property increased 2.6 per cent in 1945 over those of 1944, but total expenses increased 5.0 per cent and the operating ratio from 97.6 to 99.9. The increase in terminal expense of $10,800,000 and in equipment maintenance and garage expense of $7,700,000 account for more than half of the total increase in expenses of $34,100,000, the bureau noted. The motor carriers' net income for 1945, before taxes, decreased 92.5 per cent below the 1944 total, while truck and tractor miles operated declined 2.5 per cent and the number of tons of revenue freight transported dropped 1.1 per cent below 1944.

Suggests R. E. A. Might Apply for Air Certificates

The Civil Aeronautics Board has suggested to the Railway Express Agency that the time may have arrived when R. E. A. should file an application under the Civil Aeronautics Act's section 401 for a certificate of public convenience and necessity covering its present air-express services which are being conducted under a temporary exemption granted by C. A. B. on March 13, 1941. The suggestion, along with another to the effect that it would be "likewise appropriate" for R. E. A. to file an application for a certificate authorizing operations as an air-freight carrier, was embodied in a recent letter wherein C. A. B. undertook to explain its disapproval of a proposed R. E. A. air-freight agreement with Northwest Airlines. Also indicated was the possibility of a C. A. B. investigation of R. E. A.'s status under the Aeronautics Act.

The C. A. B. issued a June 7 press release to disclose the contents of the letter, which also went to the Northwest Airlines. According to the release, the board advised the parties that the existing exemption for R. E. A.'s air-express operations, which is subject to revocation at any time, does not cover the proposed freight operation. It went on to say that in view of R. E. A.'s "dominant position" in the air-express field, the board was of the opinion that the Express Agency should not be permitted to enter the air-freight field, as proposed in the disapproved agreement, without a showing of public convenience and necessity.

Meanwhile, the board was further reported in the release to have said that it contemplated no action with respect to rejection of the R. E. A. tariff covering the proposed freight operation, but it cautioned that this should not be deemed to constitute

a recognition of the legality of the proposed operation. The release continued as follows:

"The board pointed out with respect to the proposal of securing a broadening amendment to Railway Express' present exemption order that it might act favorably on a petition to amend the present exemption order to authorize temporary air-express operations under approved modified contract agreements with all air carriers operating under certificates of public convenience and necessity."

Then came the suggestion that it would be appropriate for R. E. A. to file applications for certificates. "No application," the release's paraphrase of the letter added, "is now on file by Railway Express for a certificate of public convenience and necessity to engage in present or proposed air-freight operations. Although the board could, and may, decide to institute an investigation into the status of Railway Express under the act, such investigation could not result in the issuance of a certificate of public convenience and necessity, if that is determined to be the proper solution."

April Accident Statistics

The Interstate Commerce Commission on June 11 made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for April and this year's first four months. The compilation, which is subject to revision, follows:

Item	Month of April		4 months ended with April	
	1946	1945	1946	1945
Number of train accidents*	1,007	1,389	5,032	6,093
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	108	112	439	433
Injured	67	88	291	334
Passengers on trains:				
(a) In train accidents*				
Killed	41	...	44	1
Injured	336	39	587	567
(b) In train-service accidents				
Killed	5	5	23	19
Injured	232	198	897	810
Travelers not on trains:				
Killed	5	1	13	1
Injured	87	89	394	409
Employees on duty:				
Killed	51	67	242	313
Injured	2,856	3,777	13,290	15,915
All other nontrespassers:**				
Killed	138	152	722	705
Injured	456	513	2,419	2,551
Total—All classes of persons:				
Killed	348	337	1,483	1,472
Injured	4,034	4,704	17,878	20,586

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than $150 to railway property.

** Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers,* were as follows:

Persons:				
Killed	125	137	691	646
Injured	300	296	1,615	1,489

House Passes Rivers Bill

The House on June 6 passed its omnibus rivers and harbors bill after trimming the total of authorized appropriations down from approximately $600,000,000 to about $518,000,000 by the elimination of the $82,000,000 project covering proposed improvements on the Big Sandy river and Tug and Levisa forks in Kentucky, West Virginia, and Virginia. The bill, H. R. 6407, is now before the Senate committee on commerce which opened hearings on it this week.

The elimination of the Big Sandy project was accomplished when the House adopted an amendment in that connection which was sponsored by Representative Dondero, Republican of Michigan. Meanwhile, it rejected an amendment sponsored by Representative Jenkins, Republican of Ohio, to eliminate the proposed $116,941,000 Tennessee-Tombigbee waterway.

Freight Car Builders Form Export Trade Group

The Railway Car Export Corporation of America has filed papers under the Export Trade Act with the Federal Trade Commission for exporting freight cars having a capacity of 10 or more metric tons, and component parts, equipment and accessories therefor. The corporation will maintain offices at 30 Church street, New York, and at 1025 Connecticut avenue, Northwest, Washington, D. C.

Officers are: C. W. Wright, president and director; R. A. Williams and Walter J. Curley, vice-presidents and directors; L. C. Haigh, secretary-treasurer and director; Harry Olde, F. A. Livingston and K. C. Gardner, directors. Members include the American Car & Foundry Export Company; Magor Car Export Corporation; Pullman-Standard Car Export Corporation; General American Transportation Corporation; Greenville Steel Car Company; Pressed Steel Car Company; and Ralston Steel Car Company.

The Export Trade Act provides that nothing contained in the Sherman Antitrust Act shall be construed as declaring to be illegal a cooperative or "association" entered into for the sole purpose of engaging in export trade and actually engaged solely in such export trade, provided there be no restraint of trade within the United States, or restraint of the export trade of any domestic competitor, and with the further prohibition of any agreement, understanding, conspiracy or act which chall artificially or intentionally enhance or depress prices within the U. S., substantially lessen competition or otherwise restrain trade therein.

W. S. A. Pries Open Rate Cases on Florida Citrus Traffic

Acting upon a petition filed by the War Shipping Administration, the Interstate Commerce Commission has reopened several proceedings wherein rates have been approved and fourth-section relief granted from time to time over the past 10 years with respect to movements of citrus fruit traffic from Florida to points in northern states. The W. S. A. petition asks that the orders in the proceedings be vacated or that they be modified to provide generally that the all-rail rates involved be seven cents per standard box higher than competing water or rail-water rates.

Among the proceedings reopened by the commission are *Citrus Fruits from Florida to North Atlantic Ports,* 211 I. C. C. 535.218 I. C. C. 637, 226 I. C. C. 315; *Citrus Fruits from Florida to Baltimore, Md.,* 237 I. C. C. 245; and *Citrus Fruits to Albany, Rensselaer, and Troy, N. Y.,* 229 I. C. C. 63. Also, various related fourth-section applications. They are assigned for hearing in Washington, D. C., on July 9 before Commissioner Mahaffie and Examiner Mohundro.

As noted in the *Railway Age* of March 30, page 698, W. S. A. and the U. S. Maritime Commission have pending before the commission another petition seeking a general investigation of railroad rates that are competitive with those of water carriers. W. S. A. now holds temporary authority from the I. C. C. to operate as a common or contract carrier by water in coastwise or intercoastal service; and it announced recently that four lines, acting as its agents, would begin service between North Atlantic ports, Florida, and Texas this month. They are the Clyde-Mallory Lines; Bull Steamship Lines; Newtex Steamship Company; and Southern Steamship Company.

The announcement added that "plans for further expansion of coastwise services as needed to meet current national transportation requirements are waiting on the outcome of various rate proceedings and petitions now pending before the Interstate Commerce Commission."

Money for Retirement Board and Mediation Board

Appropriations totaling $300,995,000 for the Railroad Retirement Board and $711,200 for the National Mediation Board and National Railroad Adjustment Board are provided in H. R. 6739, the labor-federal security appropriation bill for the fiscal year ending June 30, 1947, which was passed by the House on June 11 after having been reported that day from the committee on appropriations.

The proposed appropriation for the Retirement Board is $3,800 less than the amount recommended by the Bureau of the Budget but as compared with the current year's appropriation of $294,695,000 it is up $6,300,000. The latter, however, is more than accounted for by the increased appropriation to the Railroad Retirement Account, the $2,701,000 allowed for the board's expenses in connection with administration of the Railroad Retirement Act being $20,000 less than the comparable figure for fiscal 1946.

The proposed appropriation to the retirement account ($298,233,000 as compared with this year's $291,913,000) consists of estimated tax collections under the Carriers' Taxing Act with adjustments for underestimates of prior years and for government payments for prospective annuitants during the period of their military service, less the amount appropriated for the board's expenses.

The $711,200 which the bill carries for the Mediation and Adjustment Boards is $33,600 less than the amount recommended for those agencies by the Bureau of the Budget and $10,050 less than they have received during the current fiscal year. However, the reduction of $51,400 in the amount allowed for arbitration, emergency,

and emergency panel boards is the only cut as compared with the current year; so N. M. B. will have $37,100 more and N. R. A. B. $3,750 more for their own salaries and expenses, the total amounts thus provided being $300,000 and $280,000, respectively.

The committee's report on the bill reveals that the $110,000 allowed for expenses of arbitration and emergency boards is based on an estimate that it will be necessary during fiscal 1947 to appoint 17 such boards—each consisting of three members and sitting, on the average, approximately 30 days.

Track Agreements Can't Ban Particular Type of Traffic

Privately-owned spur tracks used by railroads for providing common-carrier freight services generally cannot be restricted against service to a particular kind of traffic, the Interstate Commerce Commission has ruled in a decision on Swift & Company's complaint against the refusal of railroads serving Cleveland, Ohio, to deliver carload shipments of livestock direct to complainant's packing plant in that city. The report in Docket No. 28714 drew dissenting expressions from Chairman Barnard with whom Commissioner Patterson agreed, and from Commissioner Splawn; while Commissioner Aitchison did not participate.

The Swift plant's direct connection is with the New York Central, the approach being over a 2,544-ft. spur track, consisting in turn of 132 ft. owned and operated by the railroad, 1,619 ft. owned by the Cleveland Union Stock Yards Company but maintained and operated by N. Y. C., and 793 ft. owned and operated by the railroad. The Stock Yard Company's section of the track was constructed in 1899, and N. Y. C. has since had general use of it under different agreements, including that of June 16, 1924, which stated that such railroad use (called "free use") was in consideration of maintenance.

Effective February 1, 1935, however, the 1924 agreement was amended to prohibit "free use" of the track for "competitive traffic," construed by the parties to mean livestock, "a charge for which shall be subject to a separate agreement." The Stock Yards then demanded on livestock delivered over the track the charges named in its tariff applicable to livestock consigned through its own facilities. No agreement concerning such charges was reached by the Stock Yards and N. Y. C.; and the latter discontinued deliveries of livestock to Swift's plant. The complainant by letter of August 14, 1941, made a formal demand for the service, which demand was refused. Swift has nevertheless continued to bill livestock to its own plant, accepting delivery through the Stock Yards facilities under protest.

Meanwhile, N. Y. C. did not cancel its tariff providing for delivery of livestock at Swift's plant, and it has continued to deliver to other packing plants served by sections of the spur which it owns. The road did, however, cancel its switching charge on the Swift livestock, which charge was absorbed by other roads handling such business. Since that cancellation on November 12, 1938, the commission noted, there has been no specific tariff authority for movement of livestock to complainant's siding when shipped to Cleveland over lines other than N. Y. C.

After looking over applicable provisions of the Interstate Commerce Act and its own pertinent prior decisions, the commission found that, "whatever may be the Stock Yards' right to altogether withdraw its track from public use," the present refusal of the railroads to deliver livestock shipments to Swift, while contemporaneously providing such service to complainant's competitors, is unduly prejudicial and preferential in violation of section 3(1), an unreasonable and unlawful practice in violation of section 1(6), and in violation of section 1(9). As summarized in the report's headnotes, other findings are that "carriers cannot make contracts which abrogate the provisions of the Interstate Commerce Act"; and that the record does not contain evidence authorizing an award of reparation.

Dissenter Barnard thought the complaint should be dismissed, it being his view that the commission was without authority to require the Stock Yards to permit the N. Y. C. to use the track for any purpose unless such use is agreeable to the Stock Yards. In leading up to this conclusion the chairman noted that the track was admittedly privately owned, and that it had not been condemned by any condemnation proceeding. Thus, he reasoned, "the sole right of determining the use thereof remains in the Stock Yards."

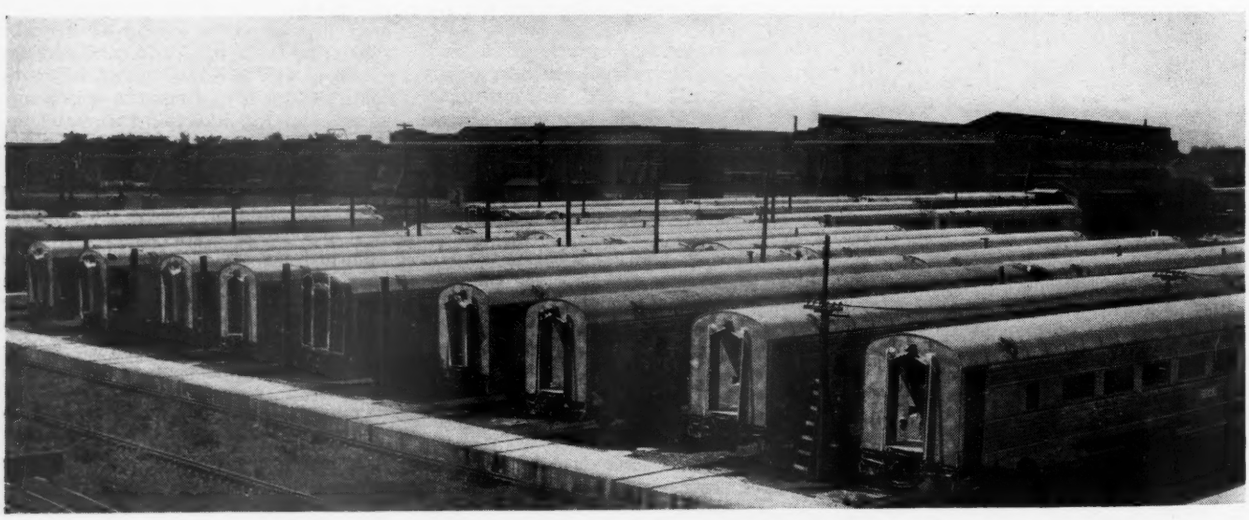
After expressing his disagreement with the majority's conclusions as to the specific violations found, Dissenter Splawn noted the "inference" in the majority report that the Stock Yard may have the right to withdraw altogether its track from private use. "If it has such authority over the track," Mr. Splawn added, "it seems to me that it has the right to restrict its use."

Rise in Freight Car Production Noted in C. P. A. Report

A sharp increase in freight car production, but a decrease in passenger car production during April, 1946, is disclosed in the latest monthly report of Civilian Production Administrator John D. Small. In April, 5,251 freight cars were produced, as compared with 2,771 in March, while only 15 passenger cars were completed in April, seven less than the number manufactured during the previous month.

According to the report, the settlement of labor difficulties and an increased supply of materials and components were the main factors contributing to the freight-car production increase. The report, however, points out that May production was expected to fall below the April level because of the effect of the coal strike on the power supply and the production of certain necessary materials. Because of the coal strike, the report adds, production of approximately 8,000 freight cars per month will probably not be reached until July.

Despite the few passenger cars produced in April, production for that month was above the January and February levels



A few of the hundreds of streamlined passenger cars which, although badly needed by the nation's railroads in their huge modernization program, remain unfinished in the Chicago yards of the Pullman-Standard Car Manufacturing Company because of non-delivery of seats, air-conditioning apparatus, electrical equipment, roller bearings, hardware, etc.

of six and nine cars, respectively. The C. P. A. attributes the drop in April production to inadequate deliveries of certain specialties and component parts such as generators and air-conditioning equipment, pointing out that in many instances car bodies are completed and awaiting installation of the special equipment.

The report added that railroads have placed orders for 2,410 new passenger cars, production of which is expected to extend "well into 1948."

Senate Approves Streamlining of Its Own Organization

A new committee on interstate and foreign commerce, which would take over virtually all functions of the present committees on interstate commerce, commerce, interoceanic canals, and manufactures, would be set up under S. 2177, the bill to streamline Senate procedures which was passed by that body on June 10. Sponsored by Senator LaFollette, Progressive of Wisconsin, the bill is the Senate version of legislation designed to carry out the Congressional reorganization plan recommended recently by a joint Senate-House committee, as noted in the *Railway Age* of March 16, page 586.

The new committee on interstate and foreign commerce would be one of 16 new standing committees set up to replace the existing 33. Among other things, its jurisdiction would embrace the regulation of railroads, motor carriers, pipe lines, airlines, water carriers, and communications facilities. It would not, however, handle rivers and harbors or highway legislation, which would be referred to the committe on public works.

Also embodied in the bill is a "general bridge act" which would eliminate the necessity of a special act of Congress to authorize the construction of each individual bridge by giving general consent to all bridges the location, plans, and specifications of which are approved by the Secretary of War and the Army's chief of engineers. As Senator LaFollette put it, this provision is designed to relieve Congress "from cranking up the legislative machinery in order to grant to a railroad or corporation the right to build a bridge across a navigable stream."

Other features of the bill include those providing each member of Congress with an administrative assistant and the committees with professional staff members appointed on a permanent basis. Also, it would increase congressional salaries to $15,000 a year and set up a retirement plan for senators and representatives.

Opposes Exempting D. & R. G. W. from Voluntary Revamp Bill

Efforts of the Chicago, Burlington & Quincy to have the Denver & Rio Grande Western exempt from provisions of H. R. 5924 were assailed in a June 11 House speech by Representative Reed, Republican of Illinois, sponsor of that measure, which would enable railroads undergoing reorganization to effect a readjustment of their financial structures without further proceedings under section 77 of the Bankruptcy Act, if their properties during a period of seven years have provided annual earnings sufficient to pay fixed charges. Mr. Reed identified the Burlington effort with a memorandum which he said Karl Fischer, assistant to the president of the road, had distributed to "many members of Congress."

According to Representative Reed, the memorandum, in which Mr. Fischer "purportedly speaks for the Burlington Lines," related also to S. 1253, the voluntary reorganization bill sponsored in the Senate by Senator Wheeler, Democrat of Montana. The "general objective" of the two bills, the congressman went on, "is to prevent the unnecessary forfeiture of $2,500,000,000 of investments in American railroads which otherwise will occur under plans of reorganization approved by the Interstate Commerce Commission in proceedings under section 77 of the Bankruptcy Act."

As explained by Mr. Reed, the Fischer memorandum's argument was "to the effect that the Burlington desires ultimately to acquire partial ownership in the Rio Grande, and in any event desires to have that railroad operated as a neutral independent carrier." It does not want the Rio Grande "returned to its present owners, the Missouri Pacific and the Western Pacific, for even a temporary period." Among other things, it "apparently fears that if legislation typified by H. R. 5924 and S. 1253 is enacted its relationship with the Rio Grande at Denver may deteriorate."

After suggesting that the proper place for the Burlington to advance its desire for partial ownership of the Rio Grande would be before the I. C. C., Representative Reed went on to say that there was no reason to suppose that the Burlington's opportunities in that connection would be made different than they now are by passage of the Reed or Wheeler bill. He continued to a detailed discussion of the Rio Grande reorganization plan as an example of "the unnecessary and inequitable sacrifice of railroad investments under the commission's depression-based plans of reorganization."

Only new legislation, he added, "can open this vise in which these investors are being squeezed." As he saw it, the issue raised by the Burlington "is actually unrelated to either of these bills." And the request "should not swerve Congress from enacting this sound remedial legislation."

On the same day that he spoke, Representative Reed inserted in the appendix to the Congressional Record the recent letters to newspapers wherein S. 1253 was opposed by A. A. Berle, Jr., and defended by Senator Wheeler. The Berle letter was reported in the *Railway Age* of June 1, page 1117, and the Wheeler reply was noted in the issue of June 8, page 1148.

Steel Controls Tightened

In anticipation of what was described as a critical shortage of steel in the next few months, the Civilian Production Administration has tightened controls over the distribution of this commodity for the third quarter of 1946, it was announced this week. The purpose of this action, it was explained, is to assure a sufficient supply of steel to meet the needs of the veterans' housing program and certain other "urgent" requirements, including the manufacture of farm implements.

Under the plan, outlined in Direction 12 to Order M-21, manufacturers of items listed as entitled to priority will certify to steel mills that orders placed by them for steel will be used only for such preferred items. The C. P. A. list includes plumbing and heating equipment for home construction, many types of farm machinery, and railroad brake shoes. Distribution of steel for other purposes, once the preferred orders are taken care of, is not affected by this action of the C. P. A.

War Prosperity Can't Alter Revamp Plans

(*Continued from page 1193*)

decision noted that "although the results of reorganizations under the section, as thus construed, have been criticized as unfortunate and changes have been suggested, no different legislation has been enacted. Indeed, a different method for reorganization, enacted in 1939 and designed to meet the requirements of railroads not in need of financial reorganization of the character provided by section 77 but only of opportunity for voluntary adjustments with their creditors, terminated on July 1, 1940, and a comparable provision made in 1942 was allowed to lapse on November 1, 1945."

With respect to the case before it, the court found that the commission was aware of all matters raised in the contentions of the general bondholders when it developed the reorganization plan. "Assuming," the opinion said, "that the courts might set aside a plan, fair and equitable when adopted by the commission, merely on account of subsequent changes in economic conditions of the region or the nation, it should not be done when the changes are of a kind that were envisioned and considered by the commission in its deliberations upon or explanations of the plan."

The "error" of the circuit court holding was found to lie "in its assumption that the senior bondholders were paid in full by the securities allocated to them without also accepting the determination by the commission that the assets represented as of January 1, 1943, and all subsequent earnings were a part also of the common stock that was awarded to the senior bondholders." The court then proceeded to uphold the district court's finding that rejection of the plan by the general bondholders was not reasonably justified.

In the latter connection it pointed out that the section 77's provision for confirmation of a plan, despite rejection by a class of creditors, was added in 1935, it being Congress' purpose "to stop the blockade of sound reorganization by classes of creditors with the veto power of the 1933 statute." This was held to be "within the bankruptcy powers of Congress." While it conceded that there might be cases wherein rejection of a commission- and court-approved plan by a class of creditors might be justified ("for example, unanticipated, large

earnings might develop"), the court found "no reasonable justification" for the rejection in the present case. Thus it affirmed the district court's orders approving and confirming the plan.

More C. A. B. Regulation for Non-Scheduled Air Lines

Following its recent action imposing safety requirements on non-scheduled air carriers, the Civil Aeronautics Board has taken four additional steps to increase its regulatory control over such operations which have been developing rapidly since the end of the war. The imposition of the safety regulations was noted in the *Railway Age* of May 25, page 1079.

The four additional steps, revealed in a C. A. B. announcement of June 5, included the issuance of an opinion on the investigation of non-scheduled operation which the board launched in June, 1944; the issuance of proposed "economic regulations" applicable to non-scheduled operators; and two decisions finding the operations of Page Airways, Inc., and Trans-Marine Airlines, Inc., to be in violation of the Civil Aeronautics Act and ordering those companies to "cease and desist from engaging in air transportation in violation of the act."

In its opinion in connection with the investigation of non-scheduled services, the board recalled that section 292.1 of its Economic Regulations was adopted in 1938 to exempt non-scheduled carriers from the act's regulatory provisions. This, it is explained, was based on a finding that non-scheduled air transportation was of limited economic significance at the time. And the present opinion departs from this exemption only to require the non-scheduled operators to register and file information concerning the extent of their services.

At the same time, as indicated above, it promulgates a proposed set-up of additional regulatory controls which has been circulated for comment of interested parties prior to adoption. This course was followed, the board's announcement explained, because most of the non-scheduled operators entered the business after the close of the war, and were thus not represented at the investigation's hearings which were held in March, 1945.

Among other things, the proposed regulations would create two classes of non-scheduled air carriers as follows: Class A, being those utilizing aircraft with a total gross weight exceeding 15,000 lb. or any single aircraft unit with a gross weight exceeding 6,000 lb.; and Class B, being all other non-scheduled carriers. The proposed regulations would apply the act's tariff-filing provisions to Class A carriers, but would continue their exemption from the certificate provisions. Class B carriers would remain exempt from all "economic" regulations except requirements with respect to the filing of reports, complying with labor legislation, and the "unfair practices" provisions of the act's section 411.

In its report on the investigation, the board asserted that the distinction between scheduled and non-scheduled air carriers is a fundamental one, which serves as a basis of distinction between two different types of service having different regulatory problems. It called a scheduled air carrier one which "operates pursuant to a scheme or plan under which, within the physical limitations of equipment and facilities, a definite quantum of service is constantly available to the traveling public, and is held out as such through a course of conduct in maintaining reasonably regular service, filing of schedules and tariffs, advertisements, etc."

In referring to non-scheduled service, the board declared that it "has a far more restricted meaning than the mere absence of a published time-table." It added that the irregularity of service necessary for exemption from full regulation "is that which does not, either directly or indirectly, lead the public to believe that between given points a reasonably certain number of flights per day or per week, or flights at approximately certain times or on certain days, may be anticipated with a reasonable degree of assurance." The report also called attention to the board's decisions in the Page and Trans-Marine cases, suggesting that they would provide assistance on the matter of its views with respect to the distinction between scheduled and non-scheduled services.

In the Page decision, the board found that Page operated a substantial number of schedules between Rochester, N. Y., Washington, D. C., and Miami, Fla.; that the number of "contract" passengers carried was relatively small as compared with the number of general public passengers hauled; that Page engaged various travel agencies and employees who actively participated in making the necessary arrangements for the carriage of public passengers and cargo, and that so long as space was available no member of the public was denied accommodations.

In the Trans-Marine case, the board found that this operator had been providing a regular service between Hyannis, Mass., and New York, via Martha's Vineyard and Nantucket islands, and that the nature of its advertisements and other contacts with the public resulted in a holding out of regular service.

The board found that both operators were air carriers within the meaning of the act's section 401; that both have not been non-scheduled within the meaning of the non-scheduled exemption order; and ordered both to cease and desist from violations of the act, as noted above.

Construction

ATLANTIC COAST LINE.—This road has awarded a contract to the J. L. Coe Company for the construction of two concrete platforms (30 ft. by 600 ft. and 25 ft. by 600 ft.) and one 15 ft. by 25 ft. connecting platform at Waycross, Ga. The work contracted for consists of reinforced concrete walls and concrete flooring on earth fill and excludes shelter and lighting. The total work involved, it is estimated, will cost over $50,000.

CHICAGO, ROCK ISLAND & PACIFIC.—Trustees of this road and the Choctaw, Oklahoma & Gulf have applied to the Interstate Commerce Commission for authority to construct a 4½-mile branch line extending northerly from Butterfield, Ark. The proposed line would serve mining interests.

Supply Trade

Merger of Two Budd Companies Approved by Stockholders

An $80,000,000 corporation to be known as the Budd Company will result from the merger of the Edward G. Budd Manufacturing Company and the Budd Wheel Company, which was voted by shareholders of both companies at their annual meetings in Philadelphia, Pa., on June 11. The merger became effective on June 12. (For previous story, see the *Railway Age* for April 13, pages 779 and 780.)

The new company will own all the assets and business, will be subject to all the liabilities of the two former companies, and will be operated in four principal divisions, automobile body, railway, wheel and induction heating.

The automobile body division, with extensive plants in Philadelphia and Detroit, Mich., supplies automobile body units to Chrysler, Ford, General Motors, Nash and Studebaker, and fabricates stainless steel body assemblies for highway truck trailers. The railway division designs and builds stainless steel trains for all types of passenger cars, including sleeping cars, reclining chair coaches, dining, lounge and observation cars. The division's new Red Lion plant in Philadelphia is now engaged in filling orders for upwards of 600 cars of various types for American railroads. The wheel division, with a recently enlarged plant in Detroit, supplies wheels to motor car builders and more than 200 truck and bus manufacturers. It also manufactures hubs, brake drums, brake mechanisms, and certain types of agricultural equipment. The induction heating division, with a separate new plant in Detroit, builds apparatus for the heating of metals by electrical induction for heat-treating or forging.

Unfilled orders of the new company aggregate approximately $158,000,000, of which Budd Manufacturing has booked $130,000,000 and Budd Wheel $28,000,000. Budd Manufacturing's share represents $75,000,000 in automotive and $55,000,000 in railroad car orders, it was disclosed.

A new financing program is planned to provide additional capital for expanding the manufacturing capacity and increasing working capital. This will involve the issuance and sale of approximately 540,000 common shares and $30,000,000 of unsecured debentures. Of the total proceeds, approximately $31,200,000 will be applied to the retirement of $3,900,000 of 2¾ per cent notes of Budd Wheel, a $14,800,000 ten-year 4 per cent Reconstruction Finance Corporation loan and $12,500,000 of bank loans of Budd Manufacturing. The balance is to be used for working capital and the purchase of additional machinery and equipment needed to expand operations, or to reimburse the treasury for purchases already made. A substantial portion of this equipment already has been ordered and installed.

The merger plan provides for the holding of common stock in the Budd Company on a share-for-share basis by the present owners of common stock of the Wheel and Manufacturing Companies. The preferred

stock of the Manufacturing Company will remain outstanding as the preferred stock of the new company. The total authorized common shares of the two old companies amounted to 3,385,000 of which 2,250,000 were of Budd Manufacturing and 1,135,000 were Budd Wheel. There also were authorized 225,000 preferred shares of Budd Manufacturing.

The authorized capitalization of the new company is 4,000,000 common and 225,000 preferred shares. Of the total common capitalization, approximately 2,700,000 common shares are being set aside in exchange for the common shares of the two old companies, there being 1,714,083 common shares of Budd Manufacturing and 985,258 common shares of Budd Wheel outstanding on the last record date.

Of the remaining 1,300,000 common shares, the new company will sell immediately approximately 540,000 shares. The offering first will be made to share-holders of record June 21, on a basis of one share for each five held, at a price to be determined later, but which is expected to be approximately 20 per cent below the market at the time the rights for purchase of the shares are issued. Warrants are to be exercisable in Philadelphia, New York and Chicago, and will expire July 8, according to present plans. The shares remaining will be offered publicly, and will be underwritten by a group of investment bankers.

C. T. Ripley, chief engineer of the **Technical Board of Wrought Steel Wheel Industry,** with headquarters at Chicago, has resigned.

E. V. Rippingille, Jr., assistant factory manager of the **Electro-Motive Division** of the General Motors Corporation, has been promoted to manager of Plant No. 2, a recently-acquired building at Chicago. Mr. Rippingille was born at Brooklyn, N. Y., and received his higher education at the University of Berlin, Germany. Upon his return to America he received his training as a mechanical engineer at the General Motors Institute, Flint, Mich., and

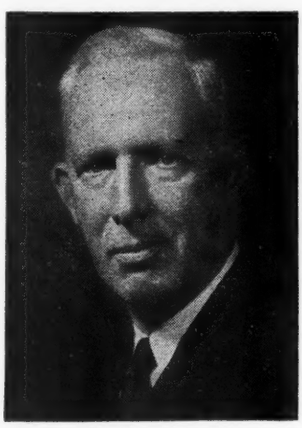
E. V. Rippingille, Jr.

from there he went to the Cleveland Diesel engine division of General Motors (then known as Winton) and worked on the assembly of Diesel engines. In May, 1937, Mr. Rippingille joined Electro-Motive as foreman of the blower manufacturing department. A short time later he was advanced to assistant plant engineer. In 1940 he was placed in charge of the manufacturing project for the General Motors "Pancake" Diesel engine for use of the Navy, and in June, 1942, he was promoted to the position he held at the time of his new appointment.

W. M. Adrian has been promoted to associate design engineer of **Luminator, Inc.** He has been with the company thirteen years.

Charles Harrison has been appointed division manager in the western Michigan territory, with headquarters in Lansing, Mich., for the industrial tool division of the **Aro Equipment Corporation,** Bryan, Ohio.

J. V. Houston has been appointed vice-president of the Ramapo Ajax division of the **American Brake Shoe Company,** with headquarters in Chicago. He is in charge of the operations of the eight Ramapo Ajax plants in the United States, and the Canadian Ramapo Iron Works, Ltd.,



J. V. Houston

in Canada. Mr. Houston is a graduate of the University of Illinois, class of 1909. He first joined Ramapo Ajax in 1910 in the engineering department and since then has been sales engineer, sales manager, assistant chief engineer and general superintendent.

B. C. O'Brien has been elected president and general manager of the **Bury Compressor Company,** Erie, Ohio. Before joining Bury Compressor, Mr. O'Brien, a graduate in mechanical engineering of the Rose Polytechnic Institute, was associated for a number of years with the Roots-Connersville Blower Corporation, where he was vice-president and general manager.

The election of three new officers and a director of the **Montreal Locomotive Works, Ltd.,** a subsidiary of the American Locomotive Company, has been announced by R. B. McColl, president. **W. L. Lentz** was elected vice-president in charge of manufacturing; **W. M. Townsend,** vice-president; and **W. J. Niles,** assistant secretary-treasurer. **J. D. Vaughan** was elected to the board of directors. Mr. Lentz and Mr. Vaughan are also, respectively, vice-president in charge of manufacturing and comptroller of the parent firm, with headquarters in New York.

Mr. Townsend has been with Montreal Locomotive since 1903 and has served as toolmaker, tool room foreman, small tool supervisor, and general supervisor of production of shop methods and extra work orders. He became superintendent of the Montreal plant in 1937 and was appointed works manager in 1939. Mr. McColl announced that Mr. Townsend is being succeeded as works manager by **Charles Madely.** Since 1917, Mr. Niles has been affiliated with Montreal Locomotive and has held important positions in the works manager's office, extra work order department and in production scheduling and control. During world war II he was appointed assistant to the works manager.

As a means of rendering improved service to its advertisers and readers in the southwestern territory, *Railway Age* has moved its Dallas, Tex., office to larger quarters. The office will hereafter be housed in a newly-remodeled and modernized office building at 2909 Maple avenue, Dallas 4, Tex. Advertising sales in the southwest will continue to be handled by **Joe Sanders,** who was transferred to the Dallas territory four years ago.

J. F. Weller has been appointed to the newly-created post of sales assistant to the president of the **American Brake Shoe Company.** When the Brake Shoe organization took over its present Kellogg division in 1939, Mr. Weller was division president and remained in this position until 1945. In 1943 he was appointed director of automotive sales for both the Kellogg division and the American brakeblock division. He will represent the entire company in his new position.

Robert J. McGreevy, recently discharged from the Navy, where he served as a lieutenant in the materials handling section of the Bureau of Supplies & Ac-

Robert J. McGreevy

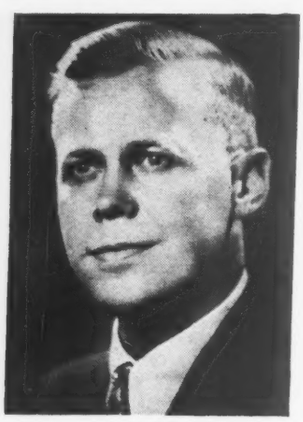
counts, has been appointed assistant district manager of industrial truck sales-engineering of the **Yale & Towne Manufacturing Co.,** for the metropolitan New York area. He will be associated with Carl E.

Lang, recently appointed New York district manager of industrial truck sales-engineering, with offices in the Chrysler building. Mr. McGreevy joined Yale & Towne in 1940 in the Pittsburgh, Pa., office and was transferred immediately after the Pearl Harbor attack to Washington, D. C., as industrial engineer to supervise the distribution of materials handling equipment to the armed forces. He enlisted in the Navy in November, 1943. Mr. McGreevy made important contributions to the materials handling services of the Navy and its industrial suppliers. He edited the Navy's Materials Handling Handbook.

Commander Hugh E. Allen, naval aviator now completing his terminal leave, has joined the **Telephonics Corporation** in New York, where his appointment as manager of electronics engineering and sales has been announced. Since August, 1943, Commander Allen has been with the Bureau of Aeronautics, assigned to the radio-electronics branch of the engineering division. In his last Navy job he was in charge of planning of electronic systems and equipage of all naval aircraft.

Alfred B. Drastrup has been appointed manager of the alloy steel sales department of the **A. M. Byers Company** of Pittsburgh, Pa. Mr. Drastrup has been associated with the company since 1931 in accounting, industrial engineering and plant management capacities and previously was with the Columbia Steel Company, Torrance, Cal., and the Gary works of the United States Steel Corporation, Gary, Ind. Born in Denmark, Mr. Drastrup received his education in business administration and accounting both in that country and the United States.

Production of alloy steel by the company was started in 1941 to complement the manufacture of wrought iron products, in which it has been engaged for more than 80 years. Facilities for the production of hot rolled



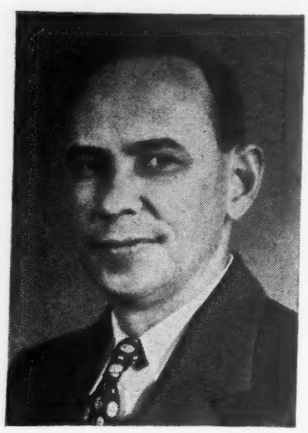
Alfred B. Drastrup

and cold drawn alloy steel bars and wire are now being installed at the company's Ambridge, Pa., plant, and will be ready for initial operations the latter part of this year.

John S. Vreeland, eastern engineering editor of *Railway Age* and eastern editor of Railway Engineering and Maintenance, has been appointed sales representative for the railway publications of the **Simmons-Boardman Publishing Corporation,** with headquarters as before in New York. The railway publications of the company include *Railway Age,* Railway Mechanical Engineer, Railway Engineering and Maintenance, Railway Signaling and the Locomotive, Car Builders', and Railway Engineering and Maintenance Cyclopedias.

Mr. Vreeland was born at Cincinnati, Iowa, on November 16, 1907, and was graduated in chemical engineering from Iowa State College, Ames, Iowa, in 1928. Prior to graduation, he worked two summers in the engineering department of the Chicago, Rock Island & Pacific and after graduation went with that road as a rodman. He was later promoted to instrumentman and served in the engineering department at various points in Iowa, Minnesota and Missouri. He also worked on new line location and construction in Missouri and as an inspector, checking joint facility accounts. In June, 1931, he was appointed a supervisor of track and served in that capacity at various points in Arkansas, Oklahoma, Iowa and Missouri.

In April, 1938, Mr. Vreeland became associated with the Simmons-Boardman Publishing Corporation as associate editor of *Railway Age* and of Railway Engineering



John S. Vreeland

and Maintenance at Chicago, and in September, 1944, he was promoted to the positions he held at the time of his present appointment, making his headquarters at New York. Mr. Vreeland is secretary-treasurer of the Metropolitan Maintenance of Way Club of New York.

W. Luther Lewis, who has been executive vice-president of the **Chicago Pneumatic Tool Company** since 1931, has been elected president to succeed **H. A. Jackson,** who will continue as chairman of the board of directors. **Robert A. Rankin** has been appointed sales manager of the Diesel engine division. Mr. Rankin, formerly assistant manager of the engine division, succeeds **H. W. Buker,** head of Diesel engine sales for the last 20 years, who has retired after 26 years' service with the company.

The **Consolidated Railway Equipment Company** has been established by **Aage B. Nilsen** for the purpose of conducting an export business. The new company has offices at 2043 Grand Central Terminal, New York, where Mr. Nilsen conducted his railway supply business for many years before the war. Officers are Aage B. Nilsen, president; **Arthur Christie,** vice-president and general manager; and **H. J. Eller,** secretary-treasurer. Mr. Nilsen, who was formerly associated with the Bettendorf Company and the MacLean-Fogg Lock Nut Company, maintained the office during his military absence, and will continue his domestic activities in addition to those of the new company.

Aage B. Nilsen

Mr. Nilsen was born in Norway and came to the United States in 1917. After serving as an apprentice in a New York Scandinavian export and import business he entered the railway supply field in 1925 as assistant to the eastern representative for the Bettendorf Company. He served for four years in the A. A. F. during the war, leaving the service with rank of major. He was a station commander for the headquarters station, 8th Air Force, seeing service both in Britain and on the European continent.

OBITUARY

Jack L. Carmitcheal, vice-president of the Lincoln Engineering Company, died on May 31.

Rudolph Louis Suhl, manager of the nickel sales department of the International Nickel Company at New York, died on June 10, at his home, 900 Belvidere avenue, Plainfield, N. J. He was 64 years old.

Abandonments

GULF, MOBILE & OHIO.—Upon petition of employee organizations, Division 4 of the Interstate Commerce Commission has extended for a further period of two years its reservation of jurisdiction with respect to the protection of employees who may be adversely affected by this road's line abandonment authorized June 6, 1944, in the Finance Docket No. 14478 proceeding.

Equipment and Supplies

C. & N. W. to Order Equipment

The Chicago & North Western will shortly place orders totaling approximately $11,726,000 for freight and passenger equipment. Of this total $7,399,000 will be applied to the purchase of streamlined passenger equipment, including one 1,000-hp. and 15 2,000-hp. Diesel-electric locomotives of the type now in use on the North Western's "400" fleet. A total of 46 passenger cars will be purchased, that is, 27 coaches, one cafe-coach, four mail-baggage cars, one dining car, nine parlor cars and four tap-diner-lounge cars. The freight equipment to be bought will consist of eight 4,500-hp. Diesel-electric locomotives for main line service and 140 70-ton covered hopper cars.

LOCOMOTIVES

The Egyptian State Railways are inquiring for eight steam locomotives of 2-4-2 wheel arrangement, two of the 2-8-2 type, and from 10 to 30 of the 4-6-0 type.

The Chesapeake & Ohio has ordered 30 freight locomotives of 2-8-4 wheel arrangement from the American Locomotive Company and 10 from the Lima Locomotive Works. The locomotives will cost approximately $9,000,000. Delivery is expected to start in the fourth quarter of this year. The inquiry for this equipment was reported in the *Railway Age* for May 18, page 1032.

FREIGHT CARS

The Northern Pacific is inquiring for 250 40-ton refrigerator cars.

The Illinois Cehtral is inquiring for 1,000 50-ton 40½-ft. box cars, 500 40-ton 40½-ft. box cars and 400 50-ton steel hopper cars.

The Continental Carbon Company and the Panhandle Carbon Company have ordered 20 covered hopper cars from the General American Transportation Corporation. Delivery has been promised later in the year.

PASSENGER CARS

The Delaware, Lackawanna & Western is inquiring for six sleeping cars.

The Reading is inquiring for eight multiple-unit passenger motor cars.

The Pennsylvania has ordered six sleeping cars from the Budd Company.

The Seaboard Air Line has ordered six sleeping cars from the Budd Company.

The Missouri Pacific has ordered four sleeping cars from the Budd Company.

The Railway Express Agency is inquiring for 500 passenger express refrigerator cars.

SIGNALING

The Norfolk & Portsmouth Belt Line has placed orders with the Union Switch & Signal Co., for materials required to rehabilitate a mechanical interlocking plant at the crossing with the Seaboard Air Line, at Portsmouth, Va. Involved is a new set of mechanical locking for a 12-lever Saxby & Farmer machine, Model ML-10 electric locks, Style TC-10 time releases, U-5 switch circuit controllers, relays, rectifiers, transformers and housings, with color-light high and dwarf signals. This road also has placed orders with Union Switch & Signal for materials required in the installation of an all-relay interlocking plant at the Norfolk Southern crossing at Norfolk, Va., including B-10 table lever control equipment, Style SL-21A electric switch locks, and other signal materials of the same type as being used at the Seaboard crossing. The construction work will be done at these two locations by railroad forces.

Financial

Uniform Policy on Employee Protection Adopted by I. C. C.

In approving the merger of the properties of the Escanaba, Iron Mountain & Western into the Chicago & North Western for ownership, management and operation, Division 4 of the Interstate Commerce Commission, without conceding that it was required to do so, has announced that it will hereafter adhere to a uniform policy of actually imposing employee-protection conditions in connection with transactions arising under the Interstate Commerce Act's section 5 (2).

The intervening Railway Labor Executives' Association maintained that the commission was required to impose the conditions in every case even though it might appear that no employees would be adversely affected at the time of the transaction. In requesting that conditions be imposed in the language of the statute, the intervenor said that while adverse affects on employees cannot be predicted, the commission would be without jurisdiction to consider the matter should that situation arise following consummation of the transaction.

The applicants, meanwhile, suggested that if the commission deemed it desirable to guard against contingencies which cannot be anticipated at the time of the hearing, employee protection could be accomplished by retention of jurisdiction to consider the matter. They further argued that even if the proposed condition would not be applicable in the event no employee is affected, and even if it makes little practical diference in this case whether they be imposed or not, the provision should not be included in any order in any case where it affirmatively appears that there are no employees affected. It said that the commission's statement to that effect and that no condition as to employee protection is necessary would be full compliance with statutory requirements.

Division 4 said that in all proceedings under section 5 (2) it has given consideration to "the interest of carrier employees affected" as required by paragraph (c) of that section. It said that its procedure has been such that (1) it has so stated and held that no condition was necessary in cases in which it was definitely shown that no employees would be affected; (2) it has reserved jurisdiction in cases in which it was not definitely shown that employees would not be affected and (3) it has prescribed conditions as required in section 5 (2) (f) or conditions as agreed upon by the parties in cases in which it appeared that employees would be affected.

"In our opinion, whether jurisdiction be reversed or conditions prescribed in the statutory language is not a matter of material importance, the employees being protected in either case," the report said. "However, it may be that a uniform practice in cases such as those classified in clauses (1) and (2) above will avoid future procedural difficulties. Accordingly, in this case, and in future cases in these two classes under section 5 (2) of the Interstate Commerce Act, we think it proper that conditions be imposed in the language of the statute as requested by the intervenor herein, with only such modification of the terminology thereof as appears necessary. No question is involved as to the procedure in cases of the class wherein conditions have been prescribed, or agreed upon by the parties as permitted by the last sentence in section 5 (2) (f)."

Thus the division approved the E. I. M. & W.-C. & N. W. merger, prescribing conditions in the language of section 5 (2) (f), which stipulates that "during the period of four years from the effective date of such order such transaction will not result in employees of the carriers affected by such order being in a worse position with respect to their employment, except that the protection afforded to any employee pursuant to this sentence shall not be required to continue for a longer period, following the effective date of such order, than the period during which such employee was in the employ of such carrier or carriers prior to the effective date of such order. . . ."

Canadian Pacific.—*Equipment Trust Certificates.*—This road, it is reported, has sold a new issue of $19,500,000 of 1½ per cent equipment trust certificates to replace the series G 2½ per cent certificates, which have been called for redemption on September 1, at 101 and accrued interest. The new issue will mature in equal semi-annual installments of $1,300,000 each from December 1, 1946 to December 1, 1953. On December 31, 1945, there were $22,100,000 of the series G certificates outstanding.

Chicago & North Western.—*Dividend Omitted.*—This road has announced that its board of directors omitted action on the preferred stock dividends at their monthly meeting in Chicago. R. L. Williams, president, attributed the omission to "very substantial increases in costs of materials and supplies", and three general wage increases since 1941 "without any compensating freight-rate increases, except for one in effect for a short time early in the war". No action will be taken on the

dividends until freight rate relief for railroads is received from the Interstate Commerce Commission, the directors said.

CANADIAN PACIFIC.—*New Director.*—Louis La Course Lang, president of the Lang Tanning Company of Kitchener, Ont., and of the Mutual Life Assurance Company of Waterloo, Ont., has been elected a director of the Canadian Pacific to succeed the late S. G. Blaylock. George W. Spinney, a director of the road and president of the Bank of Montreal, was appointed to the executive committee to succeed the late Morris W. Wilson.

ILLINOIS CENTRAL.—*Refunding.*—In an amendment to a previous application filed with the Interstate Commerce Commission, as reported in *Railway Age,* May 11, page 978, this road seeks authority to increase from 3⅛ per cent to 3¼ per cent the rate of interest to be borne by its proposed issue of $49,443,000 series A first and refunding mortgage bonds. The applicant also has asked the commission for permission to extend for 15 days to June 18, the date of the offer of exchange. According to the I. C., the changes are requested "due to certain recent events affecting the bond market."

INDIANAPOLIS UNION.—*Refunding.*—The road has sold $6,500,000 of refunding and improvement mortgage bonds, series G, maturing on June 1, 1986, to a banking group headed by Halsey, Stuart & Co. on its bid of 98.31 per cent of par for a 2½ per cent coupon, making the average annual interest cost 2.57 per cent. The bonds were offered by the banking group to the public at 98¾ per cent, to yield 2.55 per cent, and are guaranteed jointly and severally as to interest, principal and sinking fund, by the Pennsylvania and the New York Central. The sale is subject to approval by the Interstate Commerce Commission. Proceeds, plus treasury funds will be used to redeem on September 1, at 107, the $7,679,000 of outstanding 3½ per cent refunding and improvement mortgage bonds, series B. For previous item see the *Railway Age* for June 1, page 1122.

MISSOURI PACIFIC.—*Annual Report.*—Operating revenues of the Missouri Pacific last year totaled $218,038,535, compared with $236,563,909 in 1944. Operating expenses were $150,384,152, compared with $135,182,277. Fixed charges were $19,542,-655, a decrease of $282,256. Net income was $7,327,909, compared with $17,684,236. Current assets at the end of the year were $124,960,421, compared with $144,424,414. Current liabilities were $53,902,959, compared with $76,952,932. Long term debt was $376,740,936, a decrease of $25,870,037.

NEW ORLEANS, TEXAS & MEXICO.—*Annual Report.*—Operating revenues of this road in 1945 were $41,299,895, compared with $47,752,223 in the preceding year. Operating expenses were $26,442,896, compared with $25,044,024. Fixed charges were $2,867,850, an increase of $76,866. The balance of income transferred to the earned surplus account was $1,161,441, compared with $3,993,114. Current assets at the end of the year were $26,465,721, compared with $26,305,481. Current liabilities were $12,626,231, compared with $18,222,-880. Long term debt was $60,365,755, an increase of $583,087.

NEW YORK, CHICAGO & ST. LOUIS.—*Equipment Trust Certificates.*—This road has sold, subject to Interstate Commerce Commission approval, $1,780,000 of serial equipment trust certificates of 1946 to Harris Hall & Co. and associates, on the latter's bid of 99.41 for 1½ per cent coupon. For previous item, see *Railway Age* for June 1, page 1122.

NEW YORK, NEW HAVEN & HARTFORD.—*To Dissolve Holding Company.*— Both houses of the Massachusetts legislature have passed and sent to the governor an act dissolving the Boston Railroad Holding Company. Under the terms of the bill, the holding company, which is controlled by the New York, New Haven & Hartford, will be given a year to dispose of its assets which consists of 26 per cent of the voting stock of the Boston & Maine.

PENNSYLVANIA. — *Lease of Property.* — The Jersey City, N. J., Stock Yards, Inc., has applied to the Interstate Commerce Commission for authority to lease certain property in Jersey City from this road. The Pennsylvania had previously applied to the commission to acquire control of the stock yards, which had asked authority to issue $50,000 of capital stock to be delivered to that road.

PERE MARQUETTE. — *Trackage Rights.*— This road has applied to the Interstate Commerce Commission for authority to acquire trackage rights over the Pennsylvania, between Fulton street, near Union Depot, Grand Rapids, Mich., and a connecting cross-over track to be constructed by the applicant near the Fuller Block station, a total distance of 2.5 miles. At the same time, the Alleghany Corporation applied to the commission for authority to acquire control of such rights by reason of its control of the P. M. through the Chesapeake & Ohio.

PITTSBURGH & LAKE ERIE.—*Annual Report.*—Operating revenues of this road last year totaled $30,661,138, compared with $34,318,196 in 1944. Operating expenses were $31,944,543, compared with $28,470,-760. Fixed charges were $49,606, compared with $53,145. Net income totaled $3,572,242, compared with $4,488,301. Current assets at the end of the year were $17,600,133, compared with $23,592,740. Current liabilities were $7,145,244, compared with $13,661,905. Long term debt was $61,544, compared with $61,549.

WESTERN PACIFIC.—*Refunding.* — Acting upon a petition filed by this road, as reported in *Railway Age,* June 1, page 1122, the Interstate Commerce Commission has reopened for reconsideration and oral argument a decision by its Division 4, as noted in *Railway Age,* April 20, page 848, in which the division imposed certain conditions in connection wth its approval of a proposed refunding of $10,000,000 of Series A first mortgage 4 per cent bonds by issuance of a like amount of Series B bonds.

WESTERN MARYLAND.—*Equipment Trust Certificates.*—Division 4 of the Interstate Commerce Commission has authorized this road to issue $2,000,000 of 1½ per cent equipment trust certificates, series J, to finance in part the acquisition of 12 locomotives of the 4-8-4 type from the Baldwin Locomotive Works at a total cost of $2,-634,000. The decision approves sale of the certificates at 99.051, the bid of Halsey, Stuart & Co. which had been accepted subject to commission approval. The certificates will mature in 10 equal annual installments on June 15 of each year from 1947 to 1956.

Average Prices Stocks and Bonds

	June 11	Last week	Last year
Average price of 20 representative railway stocks ..	65.66	66.31	56.13
Average price of 20 representative railway bonds..	100.39	100.57	99.48

Dividends Declared

Chicago, Burlington & Quincy.—Irregular, $3.00, payable June 26 to holders of record June 12.

Clearfield & Mahoning.—$1.50, semi-annually, payable July 1 to holders of record June 20.

New York & Harlem.—10% preferred, $2.50, semi-annually, payable July 1 to holders of record June 14.

Railway Officers

EXECUTIVE

A. C. Siler, Jr., traveling freight agent of the Texas & Pacific, has been promoted to executive representative, with headquarters at Dallas, Tex.

A. J. Van Dercreek, personnel assistant of the Union Pacific at Omaha, Neb., has been promoted to assistant to the vice-president, with the same headquarters.

J. J. Anzalone, assistant to the president of the Chesapeake & Ohio, has been appointed assistant vice-president of the Chesapeake & Ohio, the New York, Chicago & St. Louis, and the Pere Marquette, with headquarters as before at Cleveland, Ohio.

P. J. Neff has been elected president of the Missouri Pacific, with headquarters at St. Louis, Mo., succeeding **L. W. Baldwin,** whose death on May 14, was reported in the *Railway Age* of May 18. **H. M. Johnson** has been elected senior vice-president and **Eugene Mock** elected vice-president of traffic. These men were recently appointed respectively, chief executive officer, executive assistant, and chief traffic officer for the trustee, as reported in the *Railway Age* of June 1 and June 8.

Samuel M. Golden, whose election to vice-president of operations of the Chicago Great Western, with headquarters at Chicago, was reported in the *Railway Age* of May 25, was born on September 26, 1900, and studied accounting at the Walton School of Commerce, becoming a certified public accountant in the State of Indiana in 1927. He started work in 1915 as an office boy for the Louis Geyler Company, automobile distributors in Chicago, later serving as stenographer and clerk. In 1919 Mr. Golden became cost clerk, later be-

coming chief cost accountant and then comptroller of the Illinois Car Manufacturing Company, at Hammond, Ind., and its affiliated and subsidiary companies. In 1928 he was appointed assistant to the president of the Standard Steel Car Company and in 1932 he was appointed assistant to the president of the Chicago Great Western. In 1934 his title was changed to assistant to the president in charge of maintenance of way and structures, maintenance of equipment and stores. In February, 1935, when the Great Western petitioned to reorganize, Mr. Golden was appointed assistant to the trustees and on February 20, 1941, he was elected vice-president in charge of maintenance of way and structures, equipment and stores, the position he held until assuming his new duties.

John J. Ekin, whose retirement as vice president in charge of accounting and freight claims of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 1 issue of *Railway Age,* was born at Whitestown, Pa., on June 8, 1873. Mr. Ekin entered the service of the Pittsburgh & Western (now part of the B. & O.) on May 21, 1895 as a warehouseman-yardman at Ellwood City, Pa., advancing subsequently through various clerical positions in the accounting depart-

John J. Ekin

ment, and in 1903 he came to Baltimore as chief clerk to auditor Subsidiary Lines of the Baltimore & Ohio. On January 1, 1908, Mr. Ekin accepted the position of auditor, Washington Terminal Company, which he held until December, 1913, when he returned to the B. & O. as general accountant. On July 1, 1915, he was promoted to general auditor, retaining that position until the period of federal control during which he was federal auditor for the Allegheny region under the United States Railroad Administration. When the roads were returned to their owners in 1920, he was appointed comptroller, occupying that position until April, 1936, when he was elected vice-president and comptroller. On October 6, 1943, he was elected vice-president in charge of accounting and freight claims. During the years 1931-1943 Mr. Ekin was comptroller of the Alton. At the time of his retirement on May 31 he also held the positions of vice-president, Railroad Credit Corporation, and vice-president, Washington Terminal Company.

Walter L. Price, whose appointment as vice-president in charge of accounting and freight claims of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 1 *Railway Age,* was born at Shrewsbury, Pa., on April 10, 1895. Mr. Price entered the service of the Baltimore & Ohio in 1912 in the office of the

Walter L. Price

auditor of freight traffic, and thereafter held successively clerical and secretarial positions in the offices of the auditors of coal and coke receipts, freight traffic, passenger traffic and of the general auditor. In 1917 he was furloughed for military service in World War I, returning to the B. & O. in July, 1919, as secretary to the comptroller, and in June, 1936, Mr. Price was promoted to assistant to vice-president and comptroller. He became assistant comptroller in charge of revenue accounts in November, 1941, remaining at that post until his promotion to comptroller in 1943, the position he was holding at the time of his current promotion, effective June 1.

John H. Hande, whose appointment as assistant to vice-president in charge of operation and maintenance of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 8 issue of *Railway Age,* was born at Park Ridge,

John H. Hande

Ill., on May 21, 1885, and studied engineering at the University of Wisconsin. From 1905 to 1911 he was assistant engineer on the Chicago & North Western and inspector in the rehabilitation of the Chicago street railways. From November, 1911, to July, 1914, he served as division engineer with the Duluth, Winnipeg & Pacific on construction from the Iron Range into Duluth, Minn., and in the valuation of this railroad's properties for the State Railroad and Warehouse Commission. Two years prior to his going with the Baltimore & Ohio he was sales engineer in Duluth and Chicago. Mr. Hande entered the service of the Baltimore & Ohio in January, 1917, as assistant engineer on federal valuation of the road's Chicago Terminal properties. In August of the following year, he became special engineer on the staff of the chief engineer, Western lines, at Cincinnati, Ohio, being transferred to Baltimore in June, 1920, as improvement engineer. Mr. Hande became accounting engineer in July, 1922, and in 1939 was appointed auditor capital expenditures, the position he was holding at the time of his recent appointment.

FINANCIAL, LEGAL AND ACCOUNTING

W. L. McGuigan, whose appointment as assistant comptroller of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the *Railway Age* of June 1, was born on August 12, 1884, at Preston, Ont., Canada. Following his graduation from St. Joseph's Collegiate Institute, Buf-

W. L. McGuigan

falo, N. Y., Mr. McGuigan entered the service of the Buffalo & Susquehanna (now part of the B. & O.) at Buffalo on September 13, 1904. He was appointed federal auditor with the United States Railroad Administration during the period of federal control of railroads, and was appointed auditor of the Buffalo & Susquehanna on March 1, 1920. Following the acquisition of this line by the Baltimore & Ohio Mr. McGuigan became special accountant under the assistant comptroller at Baltimore in January, 1932, and was appointed tax accountant in 1939. Mr. McGuigan held the latter post at the time of his recent promotion.

Frank L. Schepler, whose retirement as general freight claim agent of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 8 *Railway Age,* was born on May 26, 1875, at Baltimore, and entered railway service in 1899 as a stenographer for the B. & O. He held various clerical positions until 1916, when he became supervisor of police,

then was appointed special agent in 1917, assistant to freight claim agent in 1919, and assistant to general freight claim agent in 1920. In 1937, Mr. Schepler was promoted to the position from which he recently retired.

R. E. DeNeefe, vice-president and controller of the Gulf, Mobile & Ohio, has also been appointed controller of the Alton, with headquarters at Chicago. **C. D. Sipe,** acting controller, has returned to his former position of assistant to the chief executive officer.

H. F. Brahany, auditor of the Chesapeake & Ohio, has been appointed assistant comptroller, with headquarters as before at Richmond, Va., succeeding **O. M. Hepler,** whose advancement to comptroller at Cleveland, Ohio, was announced in the June 8 issue of *Railway Age.*

Clyde E. Catt, whose appointment as assistant comptroller in charge of disbursements of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 1 issue of *Railway Age,* was born in Pike county, Ind., on March 5, 1887, and entered railroading with the Baltimore & Ohio on July 13, 1905, as a file clerk at Washington, Ind. After serving as stenographer and clerk he was named C. T. timekeeper at Seymour, Ind., on December 1, 1910. He then was successively chief clerk to division accountant, traveling timekeeper, and division accountant. On August 1, 1921, Mr. Catt became traveling auditor of disbursements for the system,

Clyde E. Catt

being named chief clerk to the division accountant at Pittsburgh, Pa., the following year. He was appointed acting division accountant at Pittsburgh in April, 1923, becoming division accountant at Connellsville, Pa., one year later. From February, 1932, until May, 1938, he served as assistant division accountant and subsequently as division accountant at Pittsburgh, and in 1938 was appointed assistant auditor of disbursements at Baltimore, where he advanced to auditor of disbursements in 1944. He maintained the latter post until his recent promotion.

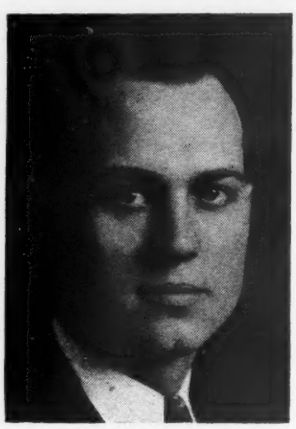
J. G. Corn, assistant to the general auditor of the Texas & Pacific at Dallas, Tex., has been promoted to assistant general auditor, with the same headquarters. **R. E. Hardwick,** also an assistant to the general auditor, has been advanced to auditor of disbursements, with headquarters as before at Dallas.

C. F. Taliaferro, assistant chief claims attorney for the Atlantic Coast Line, has been appointed chief claim agent, with headquarters as before at Wilmington, N. C. He has assumed the duties of **C. E. Saint-Amand,** chief claims attorney, who retired on June 1, at which time the offices of chief claims attorney and assistant chief claims attorney were abolished, and the titles of claim agents designated for special attorneys and law agents.

OPERATING

Jerry T. Hansen, whose promotion to division superintendent of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Miles City, Mont., was reported in the *Railway Age* of June 8, was born at Savanna, Ill., in 1897. He entered railway service in 1916 as a clerk on the Milwaukee at Savanna, being granted a leave of absence in 1918 to serve in the armed forces during World War I. In 1919 he returned to the Milwaukee as chief clerk to the division superintendent at Savanna, and four years later he was transferred to Chicago. In 1926 Mr. Hansen was promoted to trainmaster, with headquarters at Madison, Wis., later serving in the same capacity at Chicago and La Crosse, Wis. In 1939 he was advanced to assistant superintendent of the Iowa and Dakota division, with headquarters at Sioux City, Iowa, the position he held at the time of his new appointment.

Wilbur R. Galloway, Jr., whose appointment as assistant general superintendent transportation of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 8 issue of *Railway Age,* started his railway career in the motive power department of the B. & O., in 1923, after having been graduated from the Polytechnic Institute and the Maryland Institute. After completing apprenticeship courses in the Mt. Clare shops, Mr. Galloway became shop draftsman and



Wilbur R. Galloway, Jr.

assistant foreman, then, in 1929, special representative to the general manager. He was appointed assistant trainmaster at Pittsburgh, Pa., in 1935, where he later advanced to trainmaster, returning to Baltimore in the same capacity in 1937. He went with the Alton in 1941 as superintendent of the eastern division at Bloomington, Ill., then in 1943 was transferred to Chicago as superintendent of the B. & O. Chicago Terminal Railroad, which post he held until his recent advancement. Mr. Galloway succeeds **John Edwards, Jr.,** whose promotion to general superintendent transportation at Baltimore was announced in the June 8 issue of *Railway Age.* A photograph of Mr. Edwards and an account of his railroad career appeared in the February 2 issue of *Railway Age.*

G. S. Lively has been appointed trainmaster of the New River sub-division for the Chesapeake & Ohio, with headquarters at Hinton, W. Va., succeeding **W. T. Lipscomb,** who has retired.

W. T. Peyton, supervisor of agents of the Missouri-Kansas-Texas, has been promoted to superintendent of stations and claim prevention, with headquarters as before at Dallas, Tex.

TRAFFIC

Fred W. Nyland, whose appointment as general coal traffic manager of the Delaware & Hudson, with headquarters at Albany, N. Y., was announced in the May 11 *Railway Age,* was born on January 9, 1887, at Albany. He began his railway career in 1903 as a clerk in the traffic department of the Delaware & Hudson, subsequently advancing through various cler-

Fred W. Nyland

ical positions including chief clerk and chief rate clerk, then in 1918 was appointed special agent. In 1920, he became coal freight agent, and in 1936 was promoted to coal traffic manager, with headquarters at Albany. Mr. Nyland advanced to assistant general traffic manager there in 1944, and held this post until his recent appointment became effective.

C. C. Hahne, general freight agent of the Missouri Pacific at Houston, Tex., has been advanced to assistant freight traffic manager, with headquarters at St. Louis, Mo., succeeding **M. P. Eckman,** whose promotion to freight traffic manager was reported in the *Railway Age* of June 8. **H. W. Kassling,** assistant general freight agent at Houston, has been advanced to general freight agent, with the same head-

News Department continued on next left-hand page

Nickel Plate 2-8-4 built by Lima

Today's Speed will be SLOW *tomorrow!*

AMERICAN business calls continuously for faster and faster deliveries. To meet this insistent demand, the railroads require motive power capable of hauling heavier trains at higher sustained speeds.

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LIMA LOCOMOTIVE WORKS LIMA LOCOMOTIVE WORKS INCORPORATED **INCORPORATED, LIMA, OHIO**

quarters, replacing Mr. Hahne, and **G. O. Oliver** has been appointed assistant general freight agent, with headquarters at Houston, relieving Mr. Kassling.

C. N. Packard, Jr., whose promotion to general freight agent of the Chicago, Rock Island & Pacific, with headquarters at Chi-

C. N. Packard, Jr.

cago, was reported in the *Railway Age* of May 4, was born at Lincoln, Neb., on March 15, 1906. He entered railway service in January, 1923, as a clerk-stenographer on the Chicago, Burlington & Quincy, at Lincoln, subsequently holding various positions with that road until September 1, 1937, when he went with the Rock Island and was appointed a freight traffic representative, with headquarters at Los Angeles, Cal. Two years later Mr. Packard was advanced to division freight agent at Lincoln, and on January 16, 1942, he was promoted to general agent, with headquarters at Pittsburgh, Pa., the position he held at the time of his new appointment.

Harry A. Witte, whose appointment as general freight agent of the Baltimore & Ohio, with headquarters at Baltimore, Md., was announced in the June 8 issue of *Railway Age,* was born on November 14, 1895,

Harry A. Witte

at Cincinnati, Ohio, and entered railroading there in 1914 as a stenographer for the B. & O. He served in various clerical and secretarial positions until 1917, when he was furloughed to enter military service during World War I. Mr. Witte returned to the B. & O. at Cincinnati in 1919, where he advanced to chief clerk, freight tariff bureau, in 1928, then to assistant commerce agent in 1937. He was promoted to division freight agent at Indianapolis, Ind., in 1941, and transferred to Baltimore, Md., in 1945, maintaining the latter post until his recent advancement.

The Philadelphia, Pa., traffic service office of the Central of Georgia, closed during most of the war period, has been reopened, with **W. F. Leach,** who has returned after service in the United States Navy, as general agent.

F. Neil Hiller, whose appointment as freight traffic manager in charge of rates for the Delaware & Hudson, with headquarters at Albany, N. Y., was announced in the May 11 issue of *Railway Age,* was born on July 29, 1889, at Uniondale, Pa., and entered railroading in 1909 as a clerk for the Delaware & Hudson. Except for a period of service in the United States Army during World War I, Mr. Hiller held various clerical positions continuously until 1920, when he was appointed traveling freight agent, with headquarters at Buffalo, N. Y. Later that year he became

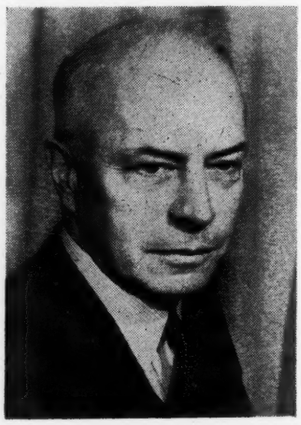
F. Neil Hiller

clerk to the general traffic manager, then in 1924, chief clerk in the traffic department, and in 1926, assistant general freight agent. Mr. Miller was promoted to general freight agent in 1936, and maintained this post until his recent advancement.

ENGINEERING & SIGNALING

John S. McCauley, second assistant division engineer on the San Joaquin division of the Southern Pacific, at Bakersfield, Cal., has been promoted to senior assistant division engineer, with the same headquarters, succeeding **W. Riseden,** who has retired. **Matthew M. McDale,** assistant engineer on the Tucson division, has been promoted to assistant division engineer, with the same headquarters. **Eldon H. Cafer,** office engineer at San Francisco, Cal., has been promoted to assistant engineer, engineering department, with the same headquarters. **Lawrence E. McCaddon,** head estimater, has been advanced to assistant engineer, on the Tucson division.

E. S. Taylor, whose appointment as engineer of signals, system, of the Canadian Pacific, with headquarters at Montreal, Que., was reported in the *Railway Age* of June 8, was born at Susquehanna, Pa., on June 20, 1889, and entered railroad service in 1905 as a telegraph operator on the Delaware & Hudson, in which capacity he served until 1910. After a short period of service with the Hall Signal Co., of Garwood, N. J., he entered the service of the



E. S. Taylor

Canadian Pacific in November, 1910, as signal inspector. In May, 1912, he became assistant to the signal engineer, and in February, 1915, he was appointed signal supervisor of the Quebec district. In May, 1926, Mr. Taylor was appointed signal engineer, eastern lines, at Montreal, and in 1939 he was transferred to Toronto, Ont., in the same capacity, the position he held at the time of his recent promotion.

Wilmer Welsh, whose appointment as signal engineer of the Baltimore & Ohio with headquarters at Baltimore, Md., was announced in the May 25 issue of *Railway Age,* started his railway career with the New York Central in 1914, joining the B. & O. in 1916 as a transitman in the signal department. In October, 1920, he returned to the New York Central, serving successively as inspector, draftsman, designer,

Wilmer Welsh

circuit engineer, and office engineer until February, 1943, when he went with the B. & O. as assistant signal engineer, the post he maintained until his recent advancement.

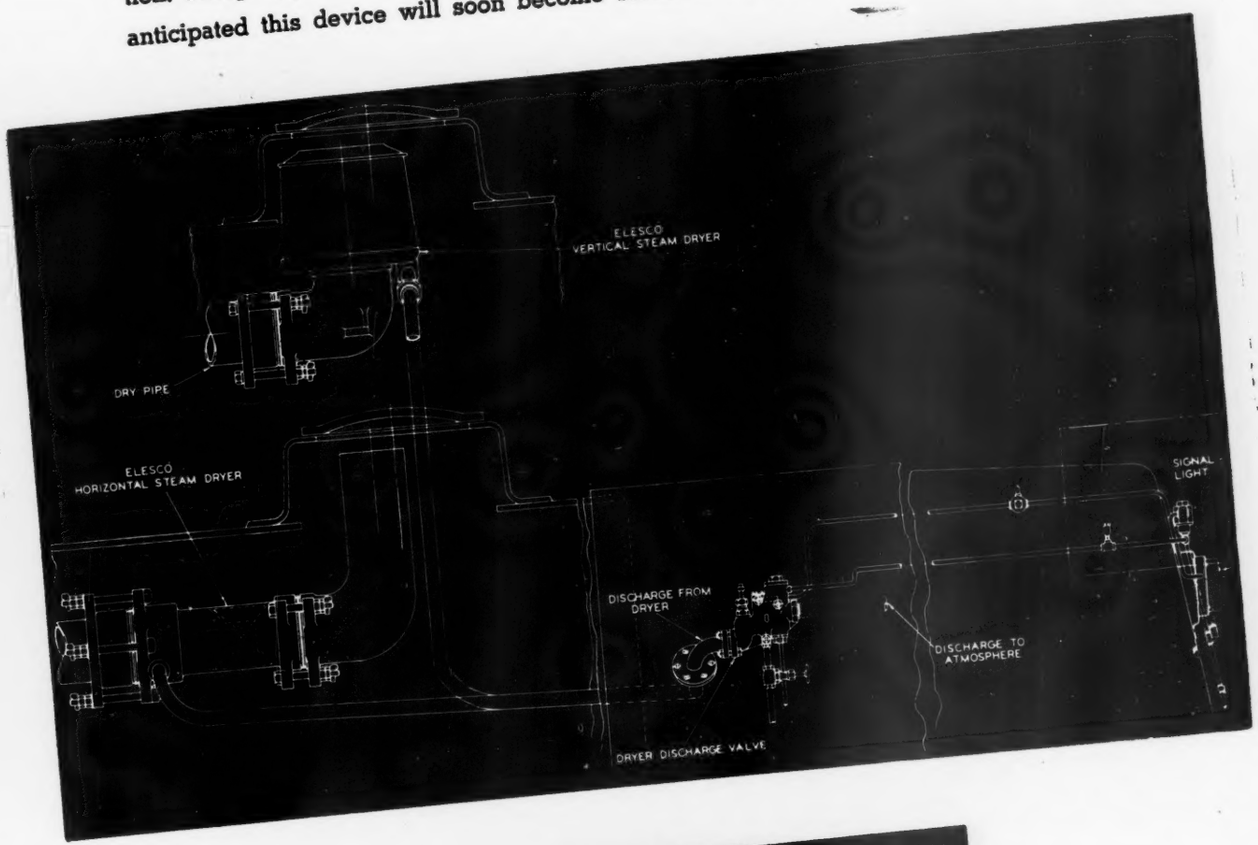
A. J. Kidd, whose promotion to signal engineer, eastern lines, of the Canadian

News Department continued on next left-hand page

Superheater Performance

Superheaters are primarily designed to add additional heat to steam and not to evaporate water. The present demands being made upon the steam locomotive boiler require maximum evaporation over sustained periods of time. This results in the steam leaving the boiler and entering the superheater with considerable entrained moisture, which must be evaporated before the superheater can fully fulfill its function.

This company has developed the *Elesco Steam Dryer* to automatically control this condition. Many applications have been made during the past year with unusual results and it is anticipated this device will soon become standard equipment for steam locomotives.



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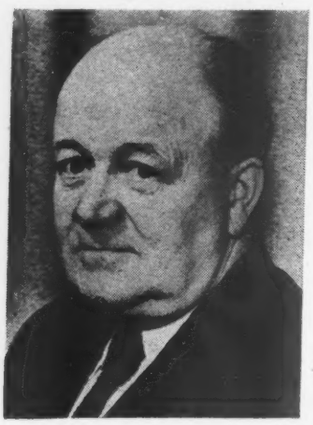
Pacific, with headquarters at Toronto, Ont., was reported in the *Railway Age* of June 8, entered the service of that road in 1905 as a rodman and draftsman, at Toronto. In 1910 he became a transitman, at Sudbury, Ont., and in 1911 he became a draftsman at Montreal, Que. Mr. Kidd was promoted to assistant signal engineer at Montreal in 1930, and in 1939 he was transferred to Toronto in the position he held at the time of his recent promotion.



Canada Pictures
A. J. Kidd

MECHANICAL

Ernest O. Dickinson, general foreman car shops of the Central of New Jersey, has been appointed superintendent car department, with headquarters as before at Elizabethport, N. J., succeeding **George C. Vogel,** who has been transferred.

T. B. Davis, traveling general car foreman for the Western Maryland, with headquarters at Hagerstown, Md., has been appointed master car builder there, succeeding **O. N. Schoppert,** who has retired after 45 years of railroad service. **V. L. Sommers** has been named to succeed Mr. Davis as traveling general car foreman.

D. H. Richmond, mechanical inspector of the Chesapeake & Ohio at Huntington, W. Va., has been promoted to master mechanic of the Chicago division, with headquarters at Peru, Ind., succeeding **J. E. McLeod,** whose transfer to Columbus, Ohio, was reported in the *Railway Age* of February 23.

W. F. Bowers, assistant electrical supervisor of the Western Maryland, has been appointed supervisor Diesel locomotive maintenance, with headquarters as before at Hagerstown, Md., succeeding **W. R. Gaither,** who has transferred to the maintenance of way department. **R. H. Harrison** has been named to succeed Mr. Bowers as assistant electrical supervisor.

William E. Corr, whose retirement as superintendent of car department for the Seaboard Air Line, with headquarters at Norfolk, Va., was announced in the June 8 issue of *Railway Age,* was born at Gloucester, Va., on April 15, 1891, and began his railroad career as a timekeeper for the Seaboard Air Line in 1912. He subsequently served successively as piecework checker, statistician, equipment inspector, assistant car foreman, foreman, general foreman, assistant master car builder, and master car builder. Mr. Corr has been superintendent of the car department at Norfolk since 1930.

Harry Farnsworth Brown, whose appointment as engineer, electric traction, for the New York, New Haven & Hartford, with headquarters at New Haven, Conn., was announced in the May 25 issue of *Railway Age,* was born on August 17, 1886, at New Haven, and was graduated from Yale university (Ph. B.) and Sheffield Scientific school (1907). During 1908 and 1909, Mr. Brown was employed in the test department of General Electric Company. He entered railroading in 1910, as a draftsman for the New York, New Haven & Hartford, advancing to assistant engineer, electrical department, in 1911. He was named assistant electrical engineer at New Haven in 1922, and maintained this position until his promotion to engineer, electric traction, which became effective on May 15. Mr. Brown is a member of the American Institute of Electrical Engineers, Committee on Land Transportation; of the Electrical Section, Engineering Division, Association of American Railroads, serving on the Committee of Direction (chairman of section 1937-42); and of the American Railway Engineering Association.

Harry F. Brown

SPECIAL

Francis V. Koval, publicity manager of the Chicago & North Western, at Chicago, has been promoted to advertising manager and publicity manager, with the same headquarters.

C. M. Wrightson, assistant manager and assistant treasurer of Camden Warehouses of the Baltimore & Ohio, has been appointed assistant manager and agent, with headquarters as before at Baltimore, Md., succeeding **W. C. Ekin,** agent, who has retired after 41 years of service with the B. & O.

OBITUARY

William F. Miller, auditor of freight accounts of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Chicago, died in a hospital in that city on May 30.

Elmer Holmquist, who retired on October 1, 1943, as master mechanic on the Wisconsin division of the Chicago & North Western, with headquarters at Chicago, died in that city on May 11.

L. S. Rose, who retired in 1938 as general manager of the Peoria & Eastern (part of the New York Central system), with headquarters at Indianapolis, Ind., died at Cincinnati, Ohio, on May 17.

George C. Fish, assistant general manager of the South-Central district of the Union Pacific, with headquarters at Salt Lake City, Utah, died suddenly on June 9, at Pocatello, Idaho.

William Sherman Jenney, who retired as vice-president and general counsel for the Delaware, Lackawanna & Western in 1939, died at his winter home in Palm Beach, Fla., on June 6, at the age of 78. He was born in Syracuse, N. Y., was graduated from Princeton university, and studied law at the University of Virginia and at Cornell university, entering railroading in 1891 as an attorney for the D. L. & W. at Syracuse. Mr. Jenney became general attorney at New York in 1905, then advanced to vice-president and general counsel in 1910. He served also as special counsel for a time after his retirement in 1939.

Ernst Melander, treasurer of the Chicago, St. Paul, Minneapolis & Omaha, with headquarters at St. Paul, Minn., died in a hospital in that city recently. He was born in St. Paul on June 2, 1883, and attended Johnson school and Globe business college. He entered railway service on September 16, 1897, as a clerk in the office of the division superintendent of the Omaha at St. Paul and four years later he was promoted to a clerical position in the office of the local treasurer. On December 1, 1911, he was advanced to chief clerk to the local treasurer and on January 26, 1927, he was appointed assistant local treasurer. Mr. Melander was further advanced to local treasurer on January 1, 1938. On May 1, 1940, he was promoted to the position he held at the time of *his* death.

Charles E. Baxter, superintendent of telegraph of the New York Central, at Detroit, Mich., whose death on May 22 was reported in the *Railway Age* of June 8, was born at Sharpsville, Ind., on November 26, 1891, and entered the service of the New York Central on November 1, 1920, as a telegraph and telephone engineer at Detroit. He was appointed assistant superintendent of telegraph on January 1, 1929, with the same headquarters, and on April 1, 1929, he became telegraph and telephone engineer at New York. On November 1, 1931, he was transferred to Detroit in the same capacity, and on June 1, 1932, he became general telegraph and telephone inspector at the same place. Mr. Baxter was appointed telegraph and telephone engineer at Detroit on January 1, 1940, and one year later he was appointed assistant superintendent of telegraph at Syracuse, N. Y. On November 1, 1944, he was appointed to the position he held at the time of his death.

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★ Average Train Speeds Increased

★ Cost Per Ton-Mile Came Down

...when the Denver and Salt Lake installed G-R-S Centralized Traffic Control

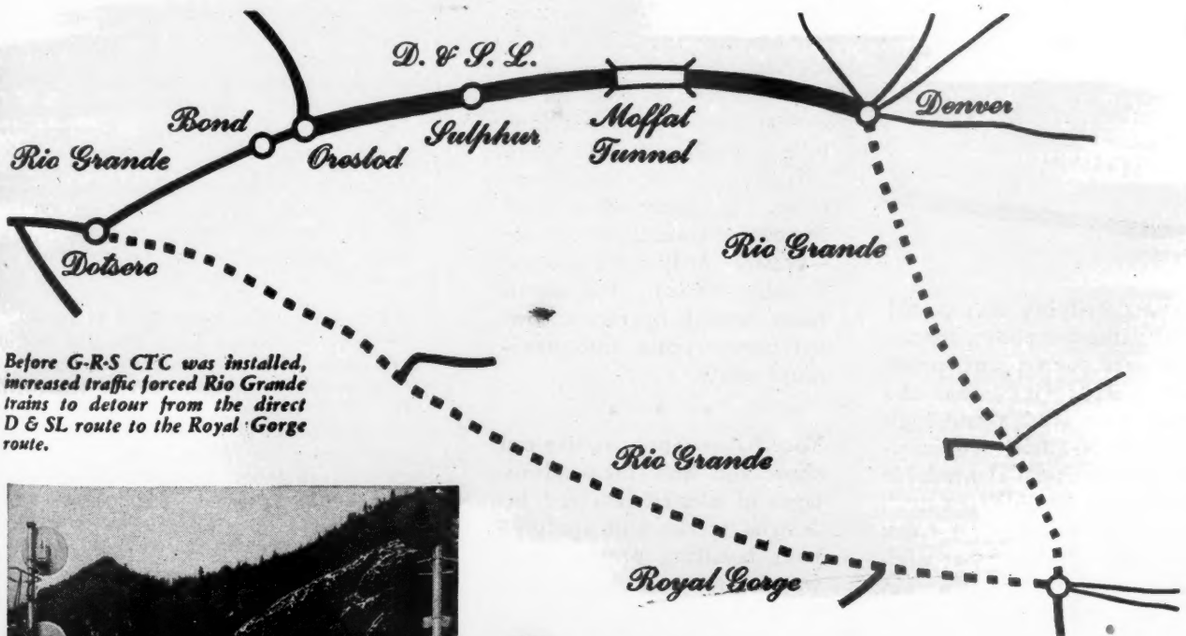
On the 128-mile stretch of the D & SL that cuts a direct route through the Rockies, linking the Rio Grande between Denver and Orestod, G-R-S Centralized Traffic Control licked a seemingly impossible traffic problem.

BEFORE the installation of CTC, increasing traffic had brought about a sharp decline in efficiency. As daily train movements jumped from 21.6 to 33.5, gross ton-miles per train-hour dipped 17 per cent, and average train speeds fell 20 per cent. The increasing traffic finally overloaded the line, forcing many Rio Grande trains to detour via the Royal Gorge Route.

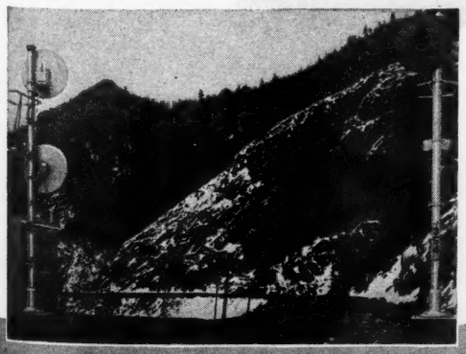
AFTER installation of G-R-S CTC, not only were detours eliminated—but the D & SL was able to handle an increase in traffic of 214 per cent! In addition, this change from train orders to operation on signal indication stepped up average train speeds. The installation has made possible more non-stop meets. It has increased the productivity of cars and motive power. It has produced important savings in fuel, supervisory costs, wear and tear, and other expenses.*

G-R-S CTC pays for itself quickly. Our nearest district office will be glad to cooperate with you in determining *in advance*, where and how you can use CTC to advantage. Simply phone or write today.

**For further information, see Railway Signaling, March, 1946*



Before G-R-S CTC was installed, increased traffic forced Rio Grande trains to detour from the direct D & SL route to the Royal Gorge route.



CTC has stepped up average train speeds on the D & SL.

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"Your letter of December 29 was received with relation to our Baker Truck. Our superintendent tells us that surprising as it may seem, no new parts are necessary. Your representative told him what adjustments could be made, and it seems that they could do it all right there at the cannery. It looks like this is just one more blue ribbon for the Baker Truck, because it is amazing that after all these years of service a general replacement of essential parts is unnecessary. It is certainly very gratifying to us."

The truck in question was purchased in 1931. The original investment has long since been written off—paid for in a short time by actual savings in handling costs and more efficient use of warehouse space. The owner has enjoyed 14 years of trouble-free service—possible only with electric trucks, which also mean quiet, smooth operation, lowest power costs and maximum safety.

—And gratifying to us, too! Letters like the above, from a food processing plant, prove two things: first, that the sturdy construction and high standards of Baker engineering design mean dependable service and long life; second, that proper industrial truck care pays the user big dividends in continuous operation and low maintenance.

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Your Baker representative can show you how these advantages of electric-powered industrial trucks will apply to your handling problems. If you don't already know him, write us direct.

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Current Publications

PAMPHLETS

Express Highways in the United States; A Bibliography, compiled by the Division of Financial and Administrative Research, Administrative Research Section, Public Roads Administration, with the cooperation of the libraries of the Federal Works Agency. 27 pages. Published by the Public Roads Administration, Washington 25, D. C. Free.

This bibliography, though not exhaustive, includes most of the significant material available on the various phases of express highway development in the United States during the last fifteen years. It is intended to serve as an aid to highway planners, administrators, and others, in their activities dealing with express highways. Categories covered by the bibliography are economic aspects, existing expressways, expressway planning, legal aspects, roadside control, and toll superhighways.

A Review of Railway Operations in 1945, by Julius H. Parmelee. 32 pages. Published by the Bureau of Railway Economics, Association of American Railroads, Transportation Building, Washington 6, D. C. Free.

This pamphlet is a reprint of the article which appeared in the January 5, 1946, issue of the *Railway Age*. Year-end figures, which were not available at the time the January 5 issue was published, have been substituted for those used in the article. Included also are appendices containing figures showing gross capital expenditures on equipment and roadway and structures and purchases of fuel, material and supplies.

Setting Up an Apprenticeship Program—A Guide to Employers in Training Veterans for the Skilled Trades. 30 pages. Published by the United States Department of Labor, Apprentice-Training Service, Washington 25, D. C. Free.

This booklet has been issued to answer the growing demand for a comprehensive explanation of how to establish an apprenticeship program and the procedures under the "G. I. Bill" when employing veterans as apprentices. It explains in detail how to determine the various provisions to include in an apprentice training program, as well as the steps a nemployer must take to obtain approval as a qualified "training institution" for veterans, and the steps a veteran must take to derive the benefits of the "G. I. Bill."

The booklet contains a complete list of state agencies designated by governors to approve business establishments and educational institutions under the "G. I. Bill" to train veterans; as well as other state and federal agencies with which employers will have some dealings in setting up an apprenticeship program. Among other things, the booklet offers a formula on how to allocate training time to the various work processes of a trade; it provides suggestions on wage rates for apprentices, on securing the cooperation of employees, and on procedure to determine appropriate credit on the term of apprenticeship for previous experience.